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ABSTRACT

Presented are eight author contributed chapters dealing with the outreach and replication of federally funded early education programs for handicapped children. M. Karnes and R. Zehrbach consider decisions regarding identification and assessment of replicable products (such as curricula and audiovisual presentations). Discussed by D. Stedman are the kinds of target audiences and methods for approaching an audience regarding replication. R. Havelock covers aspects of service delivery. General factors affecting the success of replication efforts are described by D. Weikart. E. House reviews the evaluation process for replicable products. Financial considerations are discussed by J. Moss. L. Gunn examines staff organization and training, and M. Wood describes the replication experience of the Rutland, Georgia Center (a community-based program for children with severe emotional problems). (CL)

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OUTREACH

REPLICATING SERVICES
FOR YOUNG HANDICAPPED CHILDREN

Edited by Lynn Gunn
With an Introduction by Dan Davis

With Chapters by

Merle B. Karnes
R. Reid Zehrbach
Donald J. Stedman, Ph.D.
Ronald G. Havelock
David P. Weikart, Ph.D.
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INTRODUCTION

Dan Davis

The success of education and service programs for the handicapped often depends upon the age at which service is begun. For many children, services provided early will make possible a relatively normal life. Services begun later, however, may make habilitation difficult, if not impossible. The problem of providing services centers primarily on the difficulty of coordinating resources and children. How, for example, in a country that is estimated to have more than 1,000,000 handicapped children, do you provide everyone with the services that they need?

This is a question that the legislators who passed the Handicapped Childrens Early Education Program (HCEEP) in 1968 had to consider. The approach they decided to pursue was to authorize the establishment and operation of model early education projects. Each project was to serve a particular local population. More importantly, each was expected to seek funding sources which would support the project or its program after three years, the point at which government funding would probably be terminated. All of the projects were expected to develop programs, in three years, which could be used--in whole or in part--by other groups serving the handicapped. It was the transferability of the programs which the legislators counted upon to promote service to the total U.S. handicapped population. It was also through promoting the programs they developed that the projects could expect to find alternative funding sources. In short, the success or failure of the HCEEP was tied directly to the transferability of the programs.

The words which most often have been used to describe this transfer activity are "outreach" and "replication." If a project finds money to continue its operation after government funding has been decreased or terminated or if the project finds another group or organization that wishes to use its program with a new group of children, the project is said to be in "outreach." In other words, it has found someone who is willing to pay for the program's partial or total reproduction (replication) for a new group of children; it has successfully reached out to the community for help in transferring the services it developed under the auspices of the HCEEP.

THE PROCESS

This publication is designed to explore the facets of the outreach process and to offer practical ideas for projects or others who are or will be involved in developing a program which can be replicated. By way of introduction, the process that a group must go through in order to develop and transfer a program may be considered to consist of five steps.

1. A model program must be developed. Development usually involves

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designing a curriculum, training parents and staff in its use, forming an advisory council, and then providing service to a specific population.

2. The program must be demonstrated for other organizations and for persons interested in acquiring skills and in developing programs for preschool handicapped children.

3. Products must be developed. Showing the program to outsiders will help project personnel decide which parts of the program are in greatest demand and which parts can be put into a replicable form.

4. The products must be sold to other programs. This means that the products will either be implanted in existing programs or will form part or all of a new program. For this step to take place, replicators (from the model program) must be able to comprehend quickly the potential user's needs and to estimate the usefulness of the product in his organization. While it is often felt that replication is duplication of model program components in other environments, older model programs have generally found--through experience--that the format and design of their products must be adapted to the unique characteristics of other organizational settings. They have also found that they must balance their time between teaching and training: too great an investment of staff time in another organization may lead to dependence of the replicating program on the model program.

5. Once the product can be carried by the new organization's personnel, the model project personnel should lessen and eventually terminate their involvement in the organization.

While it would seem that outreach is a fairly systematic process, a project is often forced by temporal and financial considerations to work on more than one step of the procedure at a time. The result is often confusion and frustration.

In an effort to stem some of the problems and some of the confusion associated with outreach and replication activity, TADS conducted several workshops in 1973 and 1974 with the help of experts from appropriate disciplines. The workshops were designed to investigate both theoretical and practical aspects of the subject. The papers included in this publication are the end result of presentations made at the workshops.

THIS PUBLICATION

The following chapters, like the presentations from which they came, are designed to address the major subjects which everyone who is considering replication must consider. It is important to realize that all the chapters are interrelated; the topic that each chapter covers can in practice rarely be considered separately.

-In their chapter on "Identifying Replicable Products," Merle Karnes and Reid Zehrbach consider the decisions which must be made when deciding which parts of a program should be replicated.

-The kinds of target audiences and ways to approach an audience are discussed by Donald J. Stedman in the chapter entitled "Selecting Target Audiences for Your Replicable Products."

-Ways of delivering a product to its audience and the problems that will be encountered are subjects treated in "Delivering Replicable Products to Your Audience" by Ronald Havelock.

-In "Developing and Replicating Programs in Education" David Weikart discusses the general factors which affect the success of replication efforts.

-Evaluating the success or failure of replication activities is a topic addressed by Ernest House in "Assessing the Impact of Replicable Products on Target Audiences."

-The problems and means of finding money once BEH money runs out is considered by James Moss in "Finding Money for Developing Replicable Products."

-Lynn Gunn examines the kind of staff and the training that will be needed for replication in "Organizing your Staff for Replication." She also considers the activities involved in withdrawing support as the new organization becomes capable of carrying the replication on its own.

-Finally, Mary Wood presents "A Case Study in Replication."

As you read through the manuscript, remember that it is a guide for thinking about or planning replication activities. It is neither the first nor the last word on this very complex subject. Among the sources of information on replication and outreach that you may wish to remember is the Bureau of Education for the Handicapped (BEH) which administers the Handicapped Children's Early Education Program.

Spring 1975
Chapel Hill

IDENTIFYING REPLICABLE PRODUCTS

Merle B. Karnes
R. Reid Zehrbach

INTRODUCTION

Principles and procedures for identifying and assessing potential replicable products are provided in this chapter. A product may be defined as any knowledge, attitude, or skill that is an integral part of a demonstration program. Hence, an idea, system, procedure, process, philosophy, theory, curriculum, research result, mechanical device, or audiovisual presentation may be a product. Only products which can be adopted or adapted for use at another demonstration site, however, are considered replicable products.

In selecting replicable products the model program staff, as disseminators, must consider three sets of principles: (1) principles (to be applied before target audiences are considered) for determining whether or not a product is suitable for replication; (2) principles for assessing the potential user's attitudes toward a given product; and (3) principles for selecting products that are compatible with resources. To facilitate the use of these principles, a discussion of the interrelationship between product, target audience, and delivery strategy, and a checklist for self-assessment are provided at the end of this chapter.

PRINCIPLES FOR IDENTIFICATION OF REPLICABLE PRODUCTS BEFORE TARGET AUDIENCE IS CONSIDERED

Prior to consideration of a target audience, the product should be assessed to determine its inherent replicability. The assessment should include consideration of the following qualities.

General Attributes of Products

1. Generality concerns the scope of the product's usefulness. If a product meets the needs of very few children, it may be unwise to invest an inordinate amount of time, energy, and/or funds in its packaging.
2. Relevance concerns the degree to which a product is representative of a project's program. Because behavior modification is popular, for example, a staff might spend large amounts of time gathering and disseminating information on behavior modification procedures, even though the procedures are not being used at that demonstration site and the staff lacks the professional skills to help others use the procedure. A workshop on "how to use a swimming pool" might be interesting; if it is not vital to the operation of the program, however, it would not pass the test of relevancy.
3. Worthwhileness concerns the evaluation of the product--judged by the standards of the project staff and on the basis of research evidence--to determine if the product is valuable, desirable, and useful. For example, a project might develop a unique procedure for assessing children's progress. After considering other approaches, however, the project may find that the new approach, while innovative and useful, is not appreciably more worthwhile than other procedures.

Specific Attributes of Products

1. Conveyability means that a product has characteristics which enable it to be transmitted from one site to another. Transmission may be either by a person or persons, media, or a combination of both.

   A product which is the unique combination of the knowledge, attitudes, and skills possessed by one outstanding staff member is an example of a typical, non-conveyable product. A secretary who has established, through years of volunteer service, close relationships with many civic clubs and social agencies, for example, cannot be conveyed. Generally, the product can be considered conveyable only if it is possible to separate product from staff.

   Attitudes and behaviors which may be a crucial part of the product must also be assessed for their conveyability. Often, attitudes may be conveyed through appropriate training at the replication site.

2. Flexibility is important if a product is to meet the needs of children with different handicapping conditions, significant differences in intelligence, race, or ethnic background.

   A product should be flexible, both in the range of people it can serve and in the skills and personnel required to implement it. Generally, a product which can be replicated only by a highly trained professional is not flexible enough to warrant selection, since most projects utilize paraprofessionals, volunteers, and parents to implement their programs. An evaluation system so complicated that it can be implemented only by a highly trained evaluator, for example, does not meet the requirement of flexibility.

Flexibility, of course, must be weighed with other considerations. An inflexible product may still be highly recommended for replication if it meets a heretofore unmet need.

3. The format of the replicable product should be consistent with the philosophy of the project engaging in the replication activity. For example, if a model project is based on a structured process which encompasses needs assessment, behavioral objectives, and treatment formats, the product should reflect this structure. If the philosophy of the project is essentially open education, on the other hand, the product should be organized and designed in keeping with this less structured philosophy.

4. The capabilities of the staff have a great deal to do with the selection of replicable products. If the product's replicability, for example, depends upon the delivery of services and training by demonstration site personnel, it is critical to have competent and skilled staff who have the time for dissemination activities. On the other hand, if the product is self-explanatory (e.g., a self-contained media package), it may be possible to train less skilled staff members or parent volunteers to disseminate the package through the mail.

   Different skills are necessary for planning and disseminating replication products. Staff members who prepare products may not have the personal skills or qualities to deliver them to other sites. Available staff resources, consequently, may influence the selection of products for development.

5. Products to be replicated should have qualities or procedures built into

them which will encourage users to follow through with the product's use. For example, in a record-keeping system used by persons implementing a program derived from the field of behavior modification, the user maintains careful charts which illustrate in graphic, concrete form the success or lack of success of the program. When the procedure is effective, the user knows immediately of his success. Immediate "feedback" encourages the user to continue his efforts or to modify them as demanded by the data.

6. In this age of accountability, people often want to use products which have a built-in system of evaluation. For example, a parent-training module (presented via filmstrip or motion picture) which includes a brief questionnaire or a structured observation schedule in the package, allows the user to obtain information quickly about how well viewers learned the material.

Procedures or products which are to be packaged should lend themselves to evaluation. A procedure for fostering the development of language in young children, for example, might have several components: a plan for determining where the child is functioning initially; lesson plans which delineate long-range goals and provide specific objectives for achieving the goals; step-by-step procedures for implementing the activity; a criterion task to determine if the child has learned what the teacher purported to teach; and a procedure to ensure appropriate future programming for a child. All of these components might provide a conceptual structure on which an evaluation system could be developed.

Each evaluation system should include procedures for staff to determine whether or not intended program components are implemented and with what results. The procedures should be built into the package because teachers will likely not have the time or, in some instances, the expertise to develop the evaluation system for themselves.

Facilitation Potential of Products

When identifying possible replicable products and assigning priorities for packaging, consideration should be given to each product's potential for facilitating its own adaptation or adoption. Two principles of importance in this consideration are (1) the degree to which the replicable product is consistent with the diffusion model being used and (2) the extent to which it is likely to have a synergistic effect on diffusion activities.

1. The replicable product should be consistent with the diffusion model being utilized. Havelock describes a social interaction approach to diffusion by stating:

> The overwhelming body of research associated with this social interactionist school tends to support five generalizations about the process of innovation diffusion: (1) that the individual user or adopter belongs to a network of social relations which largely influences his adoption behavior; (2) that his place in the network (centrality, peripherality, isolation) is a good predictor of his rate of acceptance of new ideas; (3) that informal personal contact is a vital part of the influence and adoption process; (4) that group membership and reference group identification are major predictors of individual adoption; (5) that the rate of diffusion through a social system follows a predictable S-curve pattern (very slow beginning followed by a period of very rapid diffusion, followed in turn by a long late adopter or "laggard" period). (Havelock, 1969, 7; also see Havelock article, this Tadscript.)

For example, a teacher is involved in a social network which includes relationships with a principal, a supervisor, an aid, and ancillary personnel;

any replicable product introduced to the teacher is likely to be more successful if it is also introduced in a professional, social-interaction setting to the set of personnel with whom he or she works.

Another example might be derived from the fact that each teacher has a place in the social network which may be central, peripheral, or isolated. In some instances it would appear best to leave this pattern undisturbed. In such instances it would seem advisable to choose a dissemination package which would not violate the pattern of social relationships. Bringing in the central persons, teaching them replicable knowledge, attitudes or skills, and assisting them in disseminating this newly acquired knowledge and behavior is consistent with the model. On the other hand, one of the goals of the replication package might be to develop a positive attitude toward other human beings. In this case involvement of central, peripheral, and isolated persons in an activity such as sensitivity training might break down old social patterns and promote the diffusion process.

2. The *synergistic possibilities* of a product should be considered before the product is selected for replication. "Synergism" simply means that two or more products (or procedures or concepts, etc.) in combination may produce a result that could not have been achieved by any one of the products or procedures alone. A playground, for example, may be a product. Maximum use of the product, however, may not occur until a curriculum delineating how the playground can be used to promote motor, cognitive, language, and social skills has been developed. Each component

(playground, curriculum, etc.) might be good in its own right; when coordinated with other components, however, the synergistic effect which results increases the quality of all the products involved.

Constraints

1. The social acceptability of a product depends upon the values of the group who will be its judge. It depends, not only upon the target audience, but also upon a combination of professional opinion and the climate of the general citizenry. The goals, objectives, and procedures promulgated by the product must be generally acceptable to other members of the profession. Procedures for integrating handicapped children with normal children, for example, might be a replicable product. Since national sentiment favors development of alternative programs in education, and since the integration idea might be acceptable to a large number of professionals in the field, the criterion of social acceptability is met.

2. Legal requirements and limits may influence selection of replication products. For example, some states only permit the purchase of instructional materials for public school classes that have been approved by the state agency. If the curriculum used in a demonstration project has not been approved by the state agency, public funds may not be used to purchase the items. Therefore, steps must be taken to obtain state approval of the curriculum before the curriculum is selected for replication. Similarly, some states require a specific number of square feet per classroom; model floor plans that provide for less than the required space may not be acceptable and, consequently, should not be

selected as a replicable product.

3. *Capabilities of staff* have a great deal to do with selection of replicable products. If a replicable product is going to require considerable staff time to develop or revise in order to be adopted, staff capabilities should be reviewed. Lack of time or expertise may be an insurmountable constraint.
4. Another consideration for selecting a replicable product is *economic feasibility*. Will the budget of the dissemination site accommodate the cost of making the product available to the target site? Expenditures may entail sending staff to the site (salaries and travel expenses), planning and organizational time, reproduction of materials, postage, telephone calls, media production, and rental of workshop space. A site should determine the way in which potential replicable products will be conveyed to users so that a budget can be developed. The budget will help disseminators decide whether or not to package the product.
5. The *physical space* needed to develop and disseminate a potentially replicable product may be very constraining. The refinement of a product in preparation for dissemination, for example, may require considerable office, reproduction (photo and mimeograph), collation, and storage space. Lack of adequate space may prevent the development of the product.
6. The *proximity* of the probable user site(s) may influence selection of a replicable product. If the sites are near the dissemination office, for example, the product may be acceptable even if it requires a considerable amount of the disseminator's time. If sites are scattered over a large area, however, replication products, of necessity, must require less staff time.

PRINCIPLES FOR IDENTIFICATION OF REPLICABLE PRODUCTS CONSIDERING NEEDS OF THE TARGET AUDIENCE (S)

The following set of principles,* which concerns the behavior of prospective replicators, should be considered when selecting replicable products.

1. The prospective replicator will be influenced by the *relative advantage of the new idea(s)* over the old or existing idea(s). If the potential replicator does not perceive that any gains can be made by implementing the new idea(s), there is little likelihood that he will adopt the product. Gains might be achieved in the economic, social, or physical safety areas.

   An example of gains in the economic area might be derived from a curriculum that can be readily implemented by paraprofessionals and/or volunteers in a program with a high teacher-child ratio (1 to 5). Since aides and volunteers are paid less than certified teachers are paid and therefore, help maintain the desirable adult-child ratio at a much lower cost, it may be economically advantageous to use such a curriculum. On the other hand, it may be necessary to employ additional aides to implement a new curriculum. The new curriculum would then be at an *economic disadvantage* because it would increase costs. The economic disadvantage would have to be offset, in the minds of the potential users, by such advantages as the acceleration of the social, emotional, cognitive, safety and/or motor development of the children.

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*These principles were adapted from Rogers, E.M. *Diffusion of Innovations*. New York: Free Press, 1962. For an expanded point of view, see Howard, J.A. and Sheth, J.N. *The Theory of Buyer Behavior*. New York: John Wiley, 1969.

In many programs for the handicapped, the children have social and emotional problems that interfere with learning. A replicable product in the form of a curriculum which effectively promotes the social development of children may demonstrate advantages in the social area over currently used curricula. Similarly, the teacher who implements the new curriculum will herself receive sound benefits from observing the successes of the children and will probably obtain positive feedback from supervisors and parents. Thus, the relative social advantage of the product would be high and would likely encourage adoption.

A design that improves the level of playground safety may be a product with great adoption potential. If potential replicators are informed of the hazards of old playgrounds and of the advantages of the new model (e.g. safety advantages) adoption is likely.

In education the personal advantage or disadvantage of a new idea may become quite relevant to the acceptance of a product. For example, if the product provides a technique whereby a teacher can plan her time better and use her time more efficiently and effectively, it may be very rewarding personally for her to adopt the new product. Such a product would seem particularly desirable to the teacher who plans carefully in her personal life.

What may be an advantage for some, however, may be a disadvantage for others. The teacher who enjoys a freer, more open, style of living might find a planned and organized classroom difficult, taxing, and unrewarding. Thus, the personal advantage or disadvantage must be determined from the viewpoint of the replicator rather than of the disseminator.

2. The degree to which the values held by the replicator are compatible with the values inherent in the replicable product can affect the behavior of a potential replicator. For example, a teacher who values individual efforts highly would find similar values in a program based on an open classroom approach. On the other hand, the teacher who values a strong emphasis on a structured approach to teaching language to young children might find greater rapport with another approach.

   The values inherent in the replicable product and the values in the population (children and parents) being served should also be compatible. If a language curriculum contains syntactical activities different from those used in the culture, dissonance between the values of the product and the population may occur--making it unwise to use the product.

   Dissonance between the values of the product and the target audience does not necessarily mean that one should not attempt to "sell" the idea. For example, members of the target audience may firmly believe that parents should not be involved in direct teaching in the classroom. The replicable product, on the other hand, might be a procedure for working with parents in the classroom. The replicable product would have to be developed with a built-in procedure for changing the attitudes of the target audience before they are taught the procedure for involving parents in the classroom.

3. In accepting any new product, there is a certain amount of risk involved. That is, it might be successful or it might fail on any of several dimensions--economic, social, physical, or personal. From an economic standpoint the

cost of the product in terms of the money and time needed to learn how to implement the product may be such that it is not worth the risk of failure. A game that costs only fifty cents to make and can be made in a half-hour does not constitute a great economic risk. In contrast, a computerized program which costs $1,500.00 to implement, which has not been fully tested, and which takes several weeks to learn to use, constitutes a sizeable risk. Rejection can come from a variety of sources, including supervisors, peer teachers, aides, parents, and the community.

Risk in the social area may be more subtle, yet even more powerful, than economic risk. If one adopts a product which is controversial, rejection of the implementor is at stake. Even a mild initial resistance from critics can cause others to seek evidence to reinforce their negative attitudes toward a product. Thus, the development of a transportable product may require the development of suggested safeguards against rejection and also suggestions for positively encouraging acceptance of the product.

If the product helps the implementor become successful, then he may gain acceptance and increase his status with peers and superiors. If, however, the product makes the implementor look too superior, his peers may feel threatened. The replicable product might include ways of interpreting the product to others to gain understanding and support. For example, if a second grade teacher understood that a product used in the preschool would more efficiently promote school readiness, the teacher might be more accepting of the product.

Occasionally some new program might offer a physical risk for a teacher or child. An example might be equipment on a playground. The implementor of such a product should have some assurance that the equipment is as safe as possible and that he or she has received sufficient training in its use to protect against accidents. Certain gross motor curricula might require the teacher to demonstrate for the children. Depending on the age of the implementor and his or her physical condition, such a product may have physical risks. The replicable product should provide cautions and alternatives to reduce risks involved when such conditions prevail.

Engaging in the implementation of a new product involves some personal risk. A teacher who has taught for several years and who is considered successful may feel threatened when asked to use products that entail procedures contrary to or different from those that he or she has been using. In selecting a replicable product, care must be taken to build into the dissemination process, or into the product itself, ways of helping the implementor make the transition easily from old to new.

4. Another principle which affects the replicator is the communicability of a product. Is the product clear, credible, and tangible?

If a product contains written material, the material should be written at a level appropriate for the user; it should be concise, carefully organized and edited, and attractively packaged. If it involves films or videotapes, the production should run smoothly, the sound track should be clear and audible, and the content should be presented in a manner which is easy to comprehend.

Whether or not the product is credible depends upon: (1) the face validity of the product, (2) the reputation of the source, and (3) the supporting data. The face validity of the product is probably the most important of the three. If the prospective implementor feels that the approach is wierd, different, way out, or contrary to all previously accepted approaches, the product will lack validity for that implementor. If the product lacks face validity but has considerable empirical validity derived from research, the disseminator must assume responsibility for interpreting the validity of the product to the potential user.

For some implementors, the reputation of the source plays a large role in whether or not a product is used. Reputation is particularly important if the implementor has previously used products developed by the source. If a site develops a good reputation for producing exemplary replicable products, it may find it easy to disseminate new ideas. In initial replication activities, characteristics of the disseminator or dissemination site will be assessed along with the product. Sometimes, consequently, it is useful to get the endorsement of a third party, an individual or a group, which has a good reputation with the potential user.

One of the greatest problems facing educators is that of demonstrating the tangibility of abstract ideas. A replicable product, for example, might be the concept of positive reinforcement. To make this concept tangible, specific examples of procedures associated with positive reinforcement need to be provided. Videotapes, films, and slides may be of considerable help in interpreting and implementing abstract ideas. If a product can be implemented without additional interpretation and/or training from the dissemination staff, the communicability of the product is high. If, however, use of a product requires specific training in addition to the built-in interpretation which accompanies the product, the communicability is low. Thus, another measure of communicability is the need for additional interpretation.

5. Another concept, important to the consumer, is divisibility--i.e., the quality which allows a portion of a product to be adopted or a large product to be divided into meaningful parts. If one can adopt a portion of a product, test it, and satisfy oneself that it is worthwhile, then the risk is reduced. A successful trial can lead to adoption of additional parts. Conversely, if the product is large and can only be implemented as a whole, the large risk often produces resistance.

Divisibility ultimately affects the economic, social, and personal domains. It is easier to buy several small products over a period of time than to buy one large expensive product. It is easier to accommodate several small changes in the social structure over a period of time than to make one major accommodation. It is easier to make several small personal adjustments than to make multiple adjustments at one time.

Divisibility is important not only because it increases the likelihood of acceptance but also because it increases the flexibility of a product. A curriculum with multiple components and multiple lesson plans is more flexible than a single large module because a replicator can be selective in adopting or adapting the product. Furthermore, divisibility allows the replicator to reject areas of weakness without rejecting an entire program.

6. Potential replicators prefer a diversity of approaches when acquiring new knowledge, attitudes, and skills. Some dissemination efforts may be transported by mail, some by telephone, some by audiovisual presentations, some through newsletters, and some by cassette tapes. An extension course, similarly, might be used to acquaint the prospective replicator with available products and to teach skills which will encourage and allow adaptation and adoption.

SELECTION OF PRODUCTS COMPATIBLE WITH RESOURCES

The selection of products compatible with resources would ideally proceed in three phases: (1) identification and statement of the ideal model to be distributed to replicating sites, (2) comparison of the resources of the potential replicating sites with the ideal model to be disseminated in order to determine those parts of the model that it will be feasible to replicate at the sites to be served, and (3) comparison of the products needed by the replicating sites with the resources of the disseminating sites to determine what it is actually possible to produce, prepare, assemble, and/or deliver.

1. To develop an ideal set of replicable products, a model center must be cognizant of what it has and/or what it may have to offer other sites. Such knowledge will enable the staff to prepare a description of the ideal model being considered for dissemination. The description should contain a statement regarding the specific products that the staff is prepared to refine and package for delivery. The principles contained in the two preceding sections of this chapter should be helpful in identifying the

specific products.

Once the specific products have been identified, criteria or lists of resources needed for replication can be developed. The criteria can be used as a checklist or questionnaire that will help in assessing each site's potential for implementing ideas. This checklist analysis will identify those products which can be delivered without additional support and those which will require some kind of support mechanism. (See the suggested checklist at the end of this chapter.)

2. Because resources affect product development, dissemination, and replication, the selection of products must be viewed from two vantage points--one from the standpoint of the replicating site and the other from the standpoint of the disseminating site. In each instance the same variables are critical: (1) administrative support, (2) personnel, (3) materials and equipment, (4) time, (5) travel, and (6) space and office supplies.

Although the variables apply to both types of sites, their application differs. The most critical variable is administrative support. The administrative staff of the replication sites must be "sold" on adopting or adapting the model program (in part or in total). They must be convinced that the model approach, or some of its products, are best for their institution. Simultaneously, they must gain an intimate understanding of the program and be able and willing to defend it to any challengers. They must accept the responsibility of providing the in-service training essential for ancillary personnel and teachers not directly involved in the replication, so that everyone at the site will understand the new program and support the staff that will be involved in its replication.

Dissemination is an activity foreign to most institutions. To engage in the activity successfully, the dissemination staff must have the degrees of freedom necessary to meet the ever-changing demands of replication sites. Administrative rigidity at the dissemination site can curtail activities and undermine the efficiency and effectiveness of the dissemination staff.

The characteristics and quality of *personnel* at the replication site is critical to the replication process. Replication staff must be receptive to new ideas and be willing to change their own patterns of behavior. They must be willing to exert more effort than is required in a stable program. Also, they must be secure enough to tolerate a certain amount of monitoring from the dissemination staff.

The skills necessary for dissemination are different than those for demonstration. The personnel in the model program, thus, should be reassessed prior to dissemination activities. Staff members must have social skills that allow them to relate well to other professionals, community leaders, paraprofessionals, and parents. At the same time, they must be able to convince the replicating site that they are knowledgeable and that they have the expertise necessary to help the replication staff. Often special skills such as the ability to write materials for dissemination, to speak in public, to develop audiovisual presentations, to edit the writing of others, and to prepare attractive displays are required. Last but not least, the size of the staff must be large enough to meet the general commitments of dissemination and the particular commitments to the replication sites.

While replication is considered a free service, it is often necessary for replicating sites to purchase and/or obtain essential materials and equipment for implementation of a model. If the materials are new, different, or unusual, special training may be needed to facilitate their use. If this is the case, the replicating site must have the assurance that the dissemination staff can provide the inservice training needed to use the materials. If equipment and material costs are kept low, replication will be easier. Replication sites often have limited budgets and can ill afford to purchase elaborate and expensive materials.

The dissemination site must have resources available to develop and package some materials and, in some cases, equipment. Products to be developed may only require paper and a mimeograph machine, or they may require more sophisticated materials and equipment such as cameras, film, television projectors, videotapes, and computer terminals. Too frequently, staff members underestimate the cost of activities. Cost should be compared with the relative benefits of different techniques. Sometimes several less sophisticated packages will result in a greater understanding of how to implement the model than a more expensive, more sophisticated technique.

An accurate assessment of the time (man-hours) necessary for the implementation of a model should be done prior to replication. Some model programs require considerable time for working with parents, developing unique and highly individualized lesson plans, training staff, and keeping records.

Dissemination staff time must be allocated to allow both dissemination goals and the needs of the replicating site to be met. The most frequently underestimated activities in terms of time are: (1) planning for workshops and visitations, (2) overall program development and coordination, (3) preparing dissemination packages, and (4) responding by telephone and/or mail to requests for materials and services. Development and refinement of products must be conducted simultaneously with package design and dissemination.

After the initial "start up," the continued success of a replicating site is contingent upon the ability of the dissemination site to generate new knowledge packages. Revising and updating existing products and designing new products is an ongoing process. As they become more sophisticated, the replicating sites will demand more and better products. Gradually the relationship between the dissemination and replication sites becomes less dependent. When the dissemination staff has nothing more to offer the replicating staff, the dissemination site may appropriately withdraw support. The dissemination staff is then free to work with other sites.

The amount of travel necessary, by either the replication or dissemination staff, to maintain the relationship must be considered in the selection of products and sites. Travel time and expense may be an encumbrance which discourages the adoption of a model program by a potential site. Similarly, potential sites may be discarded by the dissemination site because of the distance involved.

In the same vein, consideration must be given to space and supplies needed for replication. There will be restrictions on the availability of materials and work space for both the replicating and the disseminating site.

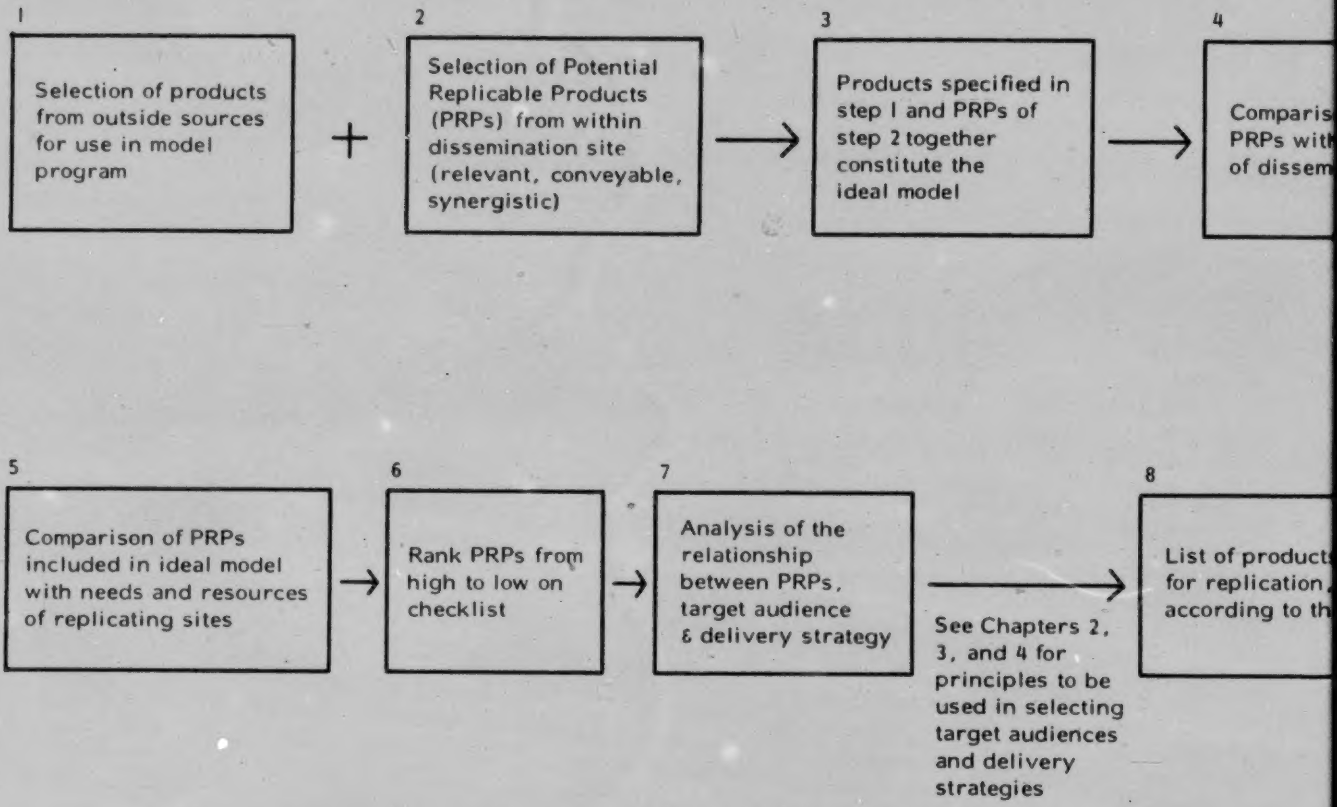
3. The relationship between product, target audience, and delivery strategy should be considered. The final selection of a product for development and dissemination (and of the system by which it will be delivered) is dependent, not only on the nature of the product, but also on the interrelationship between the product, the target audience, and the resources available. In some cases, the most worthy product may be rejected because the accompanying delivery strategy is too costly. For example, the implementation of a parent program may require the development, in the target audience, of a positive attitude toward working with parents. Since lecturing to an audience will not produce the drastic changes in attitudes that are necessary, a more direct approach is required. For example, for some teachers a film may be the initial step in bringing about a positive attitude toward family involvement. Under careful supervision, initial attitudes (via film, etc.) can be reinforced through role-playing activities. Additional experiences, such as talking directly with parents of handicapped children or observing professionals working with the parents may be necessary. Attending an eight-week summer training program where there is considerable group interaction and social pressure may additionally be necessary to help some teachers develop the desired positive attitude.

Another example of the relationship between a product, target audience, and delivery strategy might be drawn from the area of data collection. If teachers are the target audience, a presentation on data collection can be made at a relatively high level of sophistication; terms such as "cycle," "logarithm," "contingencies," "baseline data," etc., can be employed with limited time spent on definitions. Textbooks, paperbacks, and self-teaching devices may be useful tools for a teacher group. If the concept of data collection is to be presented to paraprofessionals or less sophisticated parent groups, on the other hand, the terms must either be deleted or time must be spent in developing procedures for teaching the audience the new terminology. Overheads, worksheets, even TV tapes may be useful with a less sophisticated group. Both the amount of time allotted for delivery and the sophistication of the delivery system should vary according to the capabilities and the prevailing attitudes of the target audience.

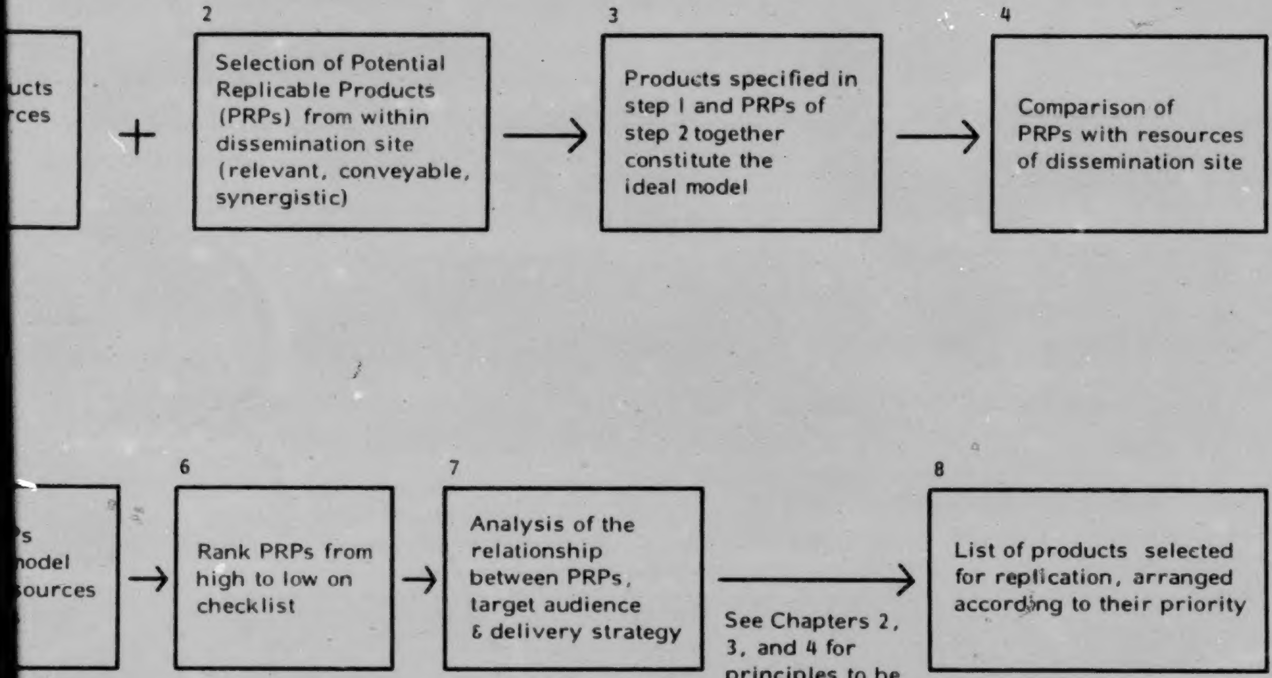
SUMMARY

The first step in the selection of a replicable product or products is the listing of several, if not all, potential products. This list can be carefully scrutinized in terms of the needs of the potential target audience, the feasibility of the delivery system, and the adequacy of the delivery system's dissemination and ongoing support mechanisms.

The following flow chart summarizes the chapter and provides a guide for using the preceding concepts in identifying replicable products.


1
Selection of products from outside sources for use in model program
+
2
Selection of Potential Replicable Products (PRPs) from within dissemination site (relevant, conveyable, synergistic)
3
Products specified in step 1 and PRPs of step 2 together constitute the ideal model
4
Comparis
PRPs wit
of dissem
5
Comparison of PRPs included in ideal model with needs and resources of replicating sites
6
Rank PRPs from high to low on checklist
7
Analysis of the relationship between PRPs, target audience & delivery strategy
See Chapters 2, 3, and 4 for principles to be used in selecting target audiences and delivery strategies
8
List of product
for replication
according to th

FLOW CHART


ucts
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+
2
Selection of Potential Replicable Products (PRPs) from within dissemination site (relevant, conveyable, synergistic)
3
Products specified in step I and PRPs of step 2 together constitute the ideal model
4
Comparison of PRPs with resources of dissemination site
Ps
nodel
sources
6
Rank PRPs from high to low on checklist
7
Analysis of the relationship between PRPs, target audience & delivery strategy
8
List of products selected for replication, arranged according to their priority

See Chapters 2, 3, and 4 for principles to be used in selecting target audiences and delivery strategies

FLOW CHART

FLOW CHART EXPLANATION

The first step in the flow chart is to select those products from the general educational domain that are relevant to, and consistent with the general philosophy of, the model center. In step 2, potential replicable products (PRPs) identified at the site are added to the list of step 1. Principles for the identification of these PRPs are delineated in the section "Principles for Identification of Replication Products Before Target Audience is Considered" and can be recorded on the checklist provided in the Appendix. The products specified in step 1 and the potential replicable products of step 2 are combined to form the "ideal" model program (step 3). In step 4, a comparison is made of the PRPs with the resources of the disseminating site; those PRPs that are too expensive in terms of resources are deleted from further consideration. In step 5, project staff members compare the remaining products from the ideal model with the needs and resources available at replicating sites. This comparison should result in a reduction of PRPs because of the limited resources available to the replicating sites. This reduced set of PRPs is then ranked (using the checklist Appendix) to develop a list of needed PRPs (step 6). An analysis of the relationships between PRPs, the target audiences, and the delivery strategies (step 7) should be made so that each product can be assigned a rank or priority which is based on appropriateness and feasibility. The result (step 8) is a prioritized list of products, each of which is selected on the basis of need and the feasibility of preparing and disseminating the product.

APPENDIX

FORM FOR RATING A POTENTIAL DISSEMINATION PRODUCT

Project name ______________________________

Title of (description) product ______________________________

Date ____________________

Name of rater ______________________________

Instructions: Read the section which outlines the principles to be used in product evaluation. Then rate the potential product on the principles using a _4_ to indicate that the product well satisfies the criterion and a _1_ to indicate that it does not meet the criterion.

_4_ = Excellent _3_ = Above Average _2_ = Below Average _1_ = Unsatisfactory

_0_ = Not Applicable

The assessment checklist follows steps presented in the flow chart. Step 1 does not require analysis, it is an _a priori_ condition.

Dimensions	Rating	Comments
Step 2. Value of product from _project_ _staff's_ point of view.		
A. General Attributes		
1. Generality		
2. Relevance		
3. Worthwhileness		
B. Specific Attributes		
1. Conveyability		
2. Flexibility		
3. Format consistent with philosophy		

Dimensions	Rating	Comments
4. Capabilities of staff		
5. Encourages continued use		
6. System of evaluation		
C. Facilitation potential		
1. Consistent with diffusion model		
2. Synergistic		
D. Constraints		
1. Social acceptability		
2. Legality		
3. Capabilities of staff		
4. Economic feasibility		
5. Physical space		
6. Proximity		
Step 3. Anticipated value of product from user's point of view		
A. Advantage of new idea		
1. Economic		
2. Social		
3. Physical safety		

Dimensions	Rating	Comments
4. Personal		
B. Compatibility of values		
1. Teacher vs program		
2. Program vs community		
C. Amount of risk		
1. Economic		
2. Social		
3. Physical safety		
4. Personal		
D. Communicability		
1. Clarity		
2. Credibility		
3. Tangibility		
E. Divisibility		
F. Diversity of approaches		

Product is judged to be (acceptable __________) for consideration as

(borderline __________)

(unacceptable __________)

a replicable product.

Acceptance means the product will be included in Step 2 of the Flow Chart, and then added to the set of PRPs in ideal model (step 3).

Prepare the following checklist for each product which passes step 3 in the flow chart.

4. Estimated resources required in the dissemination site

Rating
+ present
- absent
* can be developed
N.A. not applicable

Com

---

1. Administrative support
What kind? How much needed:

2. Personnel
What skills: How much needed:

3. Materials and equipment
What kind needed: How much needed:

4. Time
What for: How much needed:

5. Travel
For what: How much needed:

6. Space and office supplies
What kind: How much needed:

owing checklist for each product which passes step 3 in the flow chart.

esources required in the on site		Rating + present - absent * can be developed N.A. not applicable	Comments
ive support	How much needed:		
	How much needed:		
nd equipment eeded:	How much needed:		
	How much needed:		
	How much needed:		
ffice supplies	How much needed:		

Rate each PRP through step 4: based on resources in your center

acceptable __________

borderline __________

unacceptable __________

Continue on through step 5 for those items passing through step 4.

Prepare the following checklist for each product which passes step 4 in the flow chart.

5. Estimated resources necessary in replication site

Rating
+ present
- absent
* can be developed
N.A. not applicable

---

1. Administrative support
What kind? How much needed:

2. Personnel
What skills: How much needed:

3. Materials and equipment
What kind needed: How much needed:

4. Time
What for: How much needed:

5. Travel
For what: How much needed:

6. Space and office supplies
What kind: How much needed:

Rate each PRP through step 5, based on resources at potential site: acceptable ________

borderline ________

unacceptable ________

Continue on through step 6 for those products passing step 5.

List below the potential replicable products which pass step 5 on the flow chart.

Rate each product, based on the previous checklist, in terms of its desirability (high (H), medium (M), low (L)) as a replicable product.

After studying chapters 2, 3, and 4, and after considering both the relation of each product to potential targets and alternative delivery strategies, assign priorities.

PRP	Rating (H,M,L)	Priorities (number)

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2

SELECTING TARGET AUDIENCES FOR YOUR REPLICABLE PRODUCTS

Donald J. Stedman, Ph.D.

The identification, selection, and contact of organizations, individuals, and groups that potentially can be useful in spreading interest in the demonstration project and in assisting replication activities are important functions of your operation. There are a number of ways to approach the problem of identifying and analyzing potential targets (organizations or individuals). Most approaches include: determining the type of target being considered; analyzing that target; and developing a plan for making contact.

TYPES OF TARGETS

A target is any individual, group, or organization of consequence which, when mobilized, can assist the demonstration center in replication activities. There are essentially four basic types of targets. The first is the user target: that is, an organization, often like the demonstration project itself, such as a school district, a child care center, or a health department. It is an organization or group that can use the products that are being developed at and disseminated by the demonstration center.

Second, there is a conveyer target: that is, an organization, perhaps a school board, that does not make direct use of the demonstration center's product, but does help convey the fact that early identification of and assistance for preschool handicapped children can make a difference in the lives of the children. The support of such decision-making systems (or conveyer organizations) is needed to reach user organizations successfully.

A third type might be called a supporter target: that is, the PTA or some special interest group. These targets do not make the specific decision to use the product, do not put it into use, and do not directly use it themselves. However, they can be of great support and encouragement not only to user systems but also to conveyer systems because of their political or consumer involvement and influence.

Finally, there is the competing target: that is, an organization in the same community or the same region that may be competing with your project to gain the attention of user, conveyer, or supporter systems. For example, a Kiwanis Club recreation day camp for handicapped children may want the same resources that you want. Both of you may be going before the school board or the county commissioners. It's important to identify competitors in order to interact with them and gain their assistance, or at least to agree on a common turf. Perhaps a joint task can be undertaken so that both of you can move forward with user, conveyer, and supporter organizations; both of you, after all, have handicapped children as a prime interest. If you do not at least make contact, neither of you may be supported.

IDENTIFICATION AND ANALYSIS OF TARGETS

There is an ecology of organizations in the community where your demonstration program is growing, developing, and working. You may be very much aware of it. The question is, given the limited time, dollar, and human resources of your project, what are the most important types of organizations as well as the specific organizations that you should contact in order to engage in effective replication activities? First of all, it is best to identify one or two specific user organizations. Then identify the conveyer systems or organizations which have influence in the user organizations. There are always conveyer-user relationships in the ecology of organizations in the community. Examples include the school (user) and the school board (conveyer), the health department (user) and the medical society (supporter), and the community mental health center (user) and their consumer advisory board (conveyer).

It is important to identify user targets which have the most salient and effective operation in the community. Look at their organization, at their goals and objectives, and at their track records. Test their visibility in the community by talking with others. Talk to consumers to see whether, in their opinions, the products of each organization have been good. Ask associated organizations whether or not specific organizations are effective in the community. For example, see if there is a community mental health center in your area and, if so, determine whether it could be a potential user target (it might start a preschool program in five or six places in the county that would be a replication of what you have to offer). Examine the depth and competency of each potential target organization: consider its administrative lines. See what influential systems are related to it before you move toward it. Make your selections on the basis of the target's activity, experience, and credibility in the community. Then, begin to associate yourself with it!

CONTACT STRATEGY

How do you get closer to the selected organizations in order to conduct additional analyses and to become engaged with them for replication? First, and very simply, you might invite members of the hierarchy of that organization (the decision-makers either of the user, the conveyer, or the supporter organization) to your demonstration project. Let them know what you are all about. I think this approach is more effective as an opener than the use of printed materials. Second, as an alternative, you might develop what I call a "planned encounter." Arrange to meet the director of the project at a place other than your organization or his in an effort to enter his cognizance or "life space" and make your project known.

Third, try to develop a joint task. It's possible that service elements in the target organization, as well as in your own organization, can be bonded together for the purpose of sponsoring the development of a second or third replication of the demonstration center. You may have a common associate, a professional, a consumer, a parent, a politician, or an agency person to act as midwife or "interlock" person in bringing your two organizations together. Occassionally, you may have to use a "highly visible person" technique. That is, if you want to get the attention of an organization but don't seem to be doing too well, try to identify either the people whom organization members consider eminent or the people to whom members are highly attracted. For example, a baby clinic may be overwhelmed to be able to talk to Dr. Spock. Well, maybe you can't deliver Dr. Spock, but if you could help deliver some person whom they regard and value highly, they will, by association, begin to value you highly.

Analyzing the target and developing contact with target groups are processes that must be conducted in a calculated way. Be selective. Don't just swashbuckle through the whole community of organizations and hope that something will happen. Go at it in a rational, organized fashion. You have limited resources and time, and all those organizations out there are good, potential targets.

Secondly, developing contact is a systematic rather than a one-shot process. You have to use the Vince Lombardi theory: that is, "run for daylight." Be persistent. Three yards and a cloud of dust. Don't think that you are going to persuade or turn around the people or the goals and objectives of major organizations with a very short association, with minimal input, with a pamphlet, or with one visit to your demonstration project.

Replication activity is something that cannot be "bootlegged." It must be built into the organization of your demonstration center. People with your organization must be clearly assigned to the task of developing contacts. A luncheon once a month conducted by the director is not enough to establish a useful relationship with targets. Replication must be planned just as clearly as you must plan a class for Monday morning. You must go at it in a business-like fashion. People, either consultants or staff members, must be hired who have competence in replication in order for target identification to be a successful gambit.

Finally, to me, the central thrust of the whole First Chance system demands that we not stop at the level of demonstrating that something can be done. We must go beyond demonstration, both in order to infiltrate the thinking and the behavior of other individuals and organizations of consequence in the community, the region, and the nation; and in order to be effective in reaching the overall goal of services for all preshool handicapped children by 1980.

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3

DELIVERING REPLICABLE PRODUCTS TO YOUR AUDIENCE

Ronald G. Havelock

To many people, the word "delivery" may suggest the existence of a fully developed product which can be adopted or used by an appropriate consumer if the sender has the right address and enough money to pay the postage. To the more commercially oriented, it may also convey some notions of packaging, pricing, advertising, distributing to retail outlets, displaying, and selling. While such conceptions of a "delivery" process are appropriate for some kinds of products, they don't help us much in understanding how people come to adopt complex social and organizational innovations. There are basically two orientations toward an innovation problem which involves knowledge transfer. We could label these the "sender or seller's view," and the "consumer's view." The sender sees everything in terms of his product; he knows it's good; he knows it fills a need, at least for him; he knows that others ought to buy it. If he can only say the right things about it, make it attractive, demonstrate how it works, then other human beings, being rational, will embrace it with equal fervor.

The consumer, on the other hand, feels that "delivery" is supposed to happen only in response to his requests. The requests are based on his own needs and situation. Resources to fit those needs don't exist in any one place. They may be anywhere, but the closer at hand the better.

In a sense, the task of the change agent is to find a meeting ground between the seller's and the consumer's points of view.

STAGES IN INNOVATION FROM THE POINT OF VIEW OF THE PEOPLE WHO ARE CHANGED (THE CLIENT SYSTEM)

First, consider the viewpoint of the person or persons whom you have defined as your "targets for change." To understand your target audience, you must be able to see it as a problem-solving system unto itself. Every person, every group, and every social organization--to survive in a changing world--necessarily has to have some sort of problem-solving process. This does not mean that everyone is an expert problem solver or that everyone finds innovative solutions when they have a problem; but everyone does develop some sort of procedure for coping with change.

Figure 1
Change by Simple Reflex

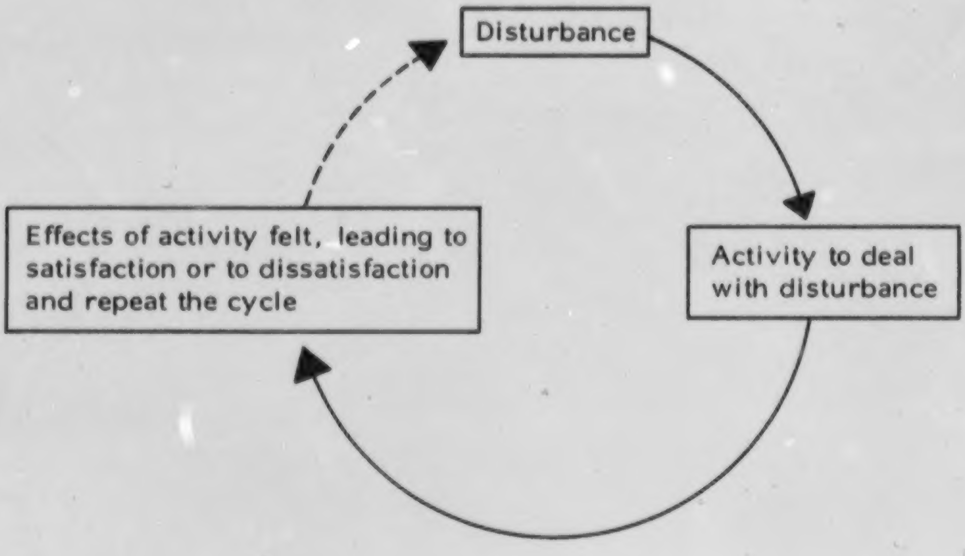
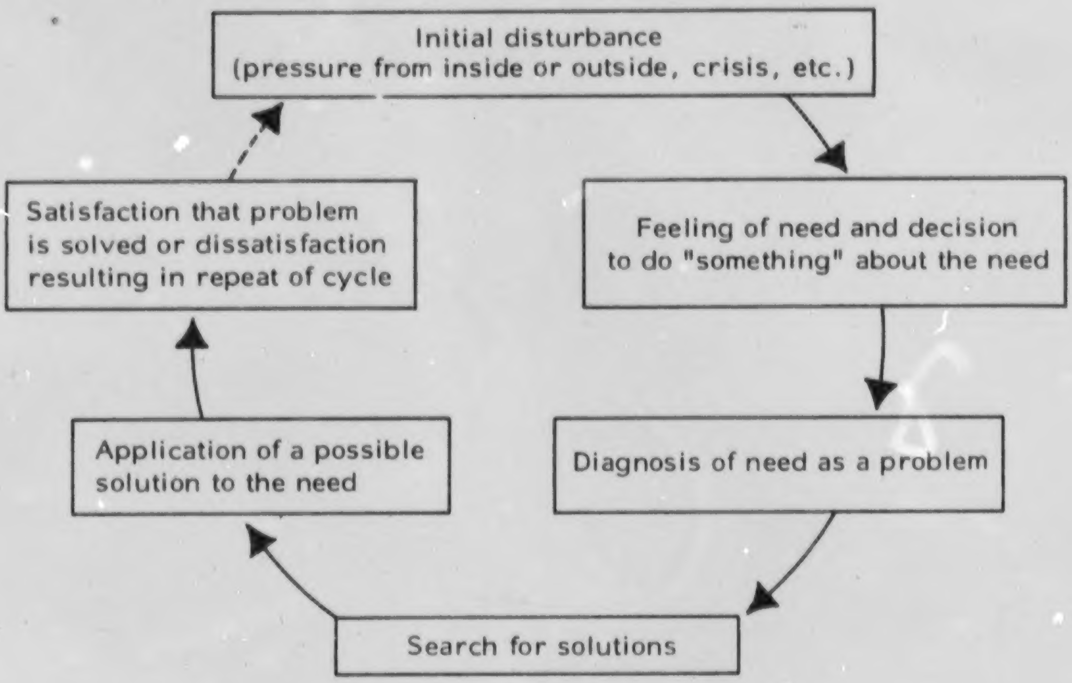

Disturbance
Activity to deal with disturbance
Effects of activity felt, leading to satisfaction or to dissatisfaction and repeat the cycle

Figure 1 represents, in the simplest terms, the stages that someone might follow in solving a problem. A stimulus, internal or external, leads to a response: we are hungry, we eat; we are cramped, we shift positions; the teachers strike, the school board fires the teachers; students assault teachers, the superintendent puts policemen in the classroom. A good deal of the problem-solving in education is of this reflexive variety (Figure 1).

Figure 2 suggests an alternative to reflexive problem solving. It suggests a somewhat more detailed and rational problem-solving model. It starts with a disturbance, and then subdivides the response "activity" into four steps: (1) a decision to do something; (2) an attempt to define the problem; (3) a search for potential solutions; and (4) an application of one or more potential solutions in an effort to satisfy the need.

Figure 2

Change by Rational Problem-Solving


Initial disturbance (pressure from inside or outside, crisis, etc.)
Feeling of need and decision to do "something" about the need
Diagnosis of need as a problem
Search for solutions
Application of a possible solution to the need
Satisfaction that problem is solved or dissatisfaction resulting in repeat of cycle

The challenge to you as change agents is to design a delivery strategy which parallels the stages of problem-solving in user systems. You should keep in mind that the target-user is not a single person. The user is most often a complex social group, a county, maybe even a state or larger unit. Planning for delivery will be more productive if you approach the target group collectively, i.e., as a "system." As a system, the target has two important characteristics (see Figure 3). First, it is a group that has in common many values, beliefs, and needs. You may share some of these values (etc.) and not others. Thus, some will block, while others will facilitate, interaction. In any case, you need to know the characteristics of the system. Second, the target group contains a social network. You must ascertain the structure of the network and the key people in that structure who must be reached.

Once you have familiarized yourself with the target, you must begin both to overcome the barriers to change that are in individual people, and to plan a strategy which is appropriate for the social system and for the individuals within it.

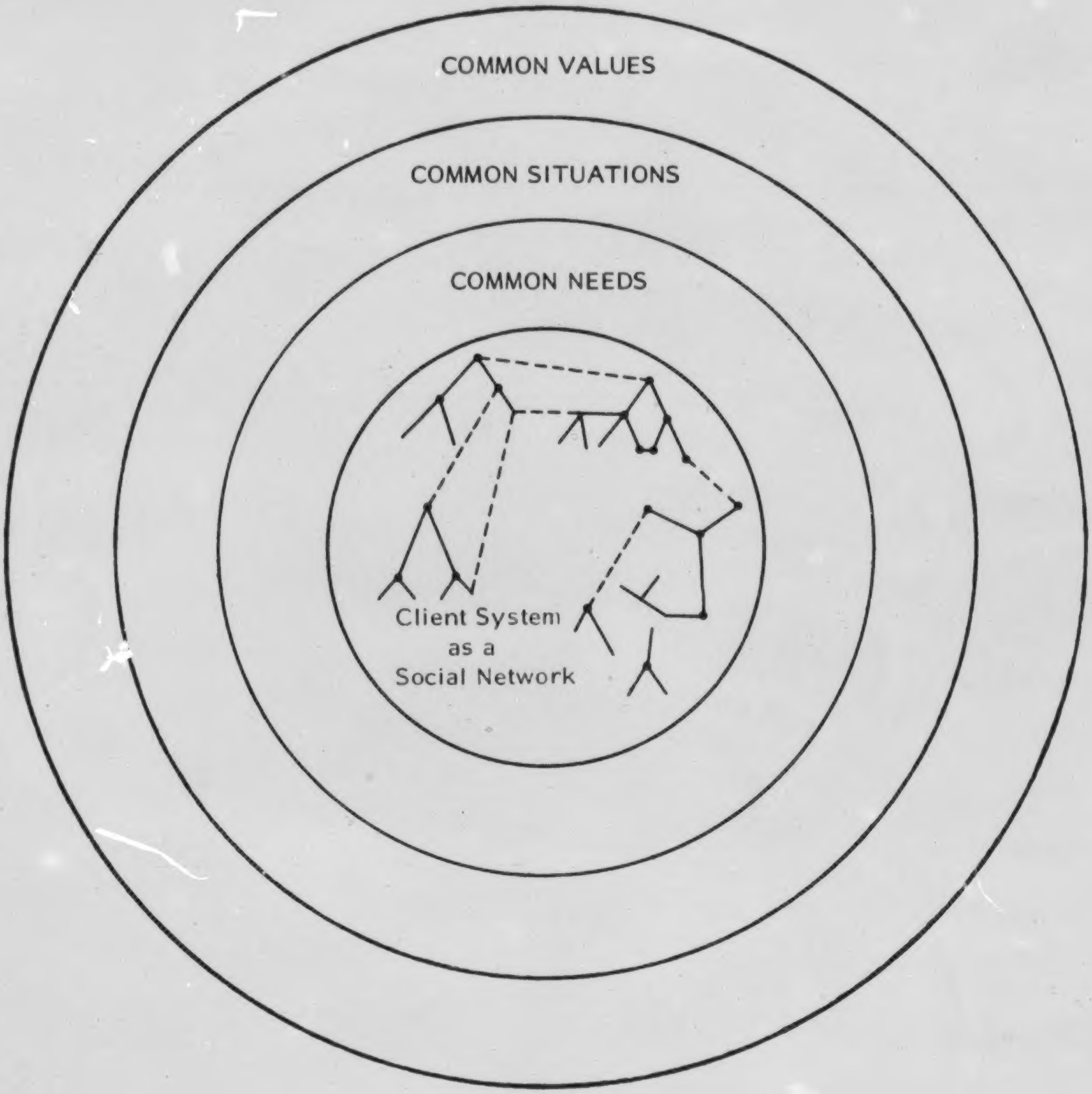
Each individual who will be involved in the adoption of your program must be allowed to become familiar with the innovation, to learn how it is used, and to accept it as a part of his routine behavior. The acceptance process usually follows a six-step sequence: awareness, interest, evaluation, trial, adoption, and integration (see Figure 4).

MATCHING THE CHANGE AGENT'S ACTIVITIES WITH THE INDIVIDUAL USER'S ADOPTION PROCESS

As a change agent, you should try to facilitate each of these six processes.

Figure 3

The Target-User is not a Single Person but a Social Network Linked by Communication and Bonded by Common Things


COMMON VALUES
COMMON SITUATIONS
COMMON NEEDS
Client System
as a
Social Network

You should time your activities to correspond to the level of acceptance particular users have reached. In other words, you should try to ascertain where potential adopters are, in terms of these six phases, so that your approach is consistent with their needs. Here are a few ideas, taken stage-by-stage.

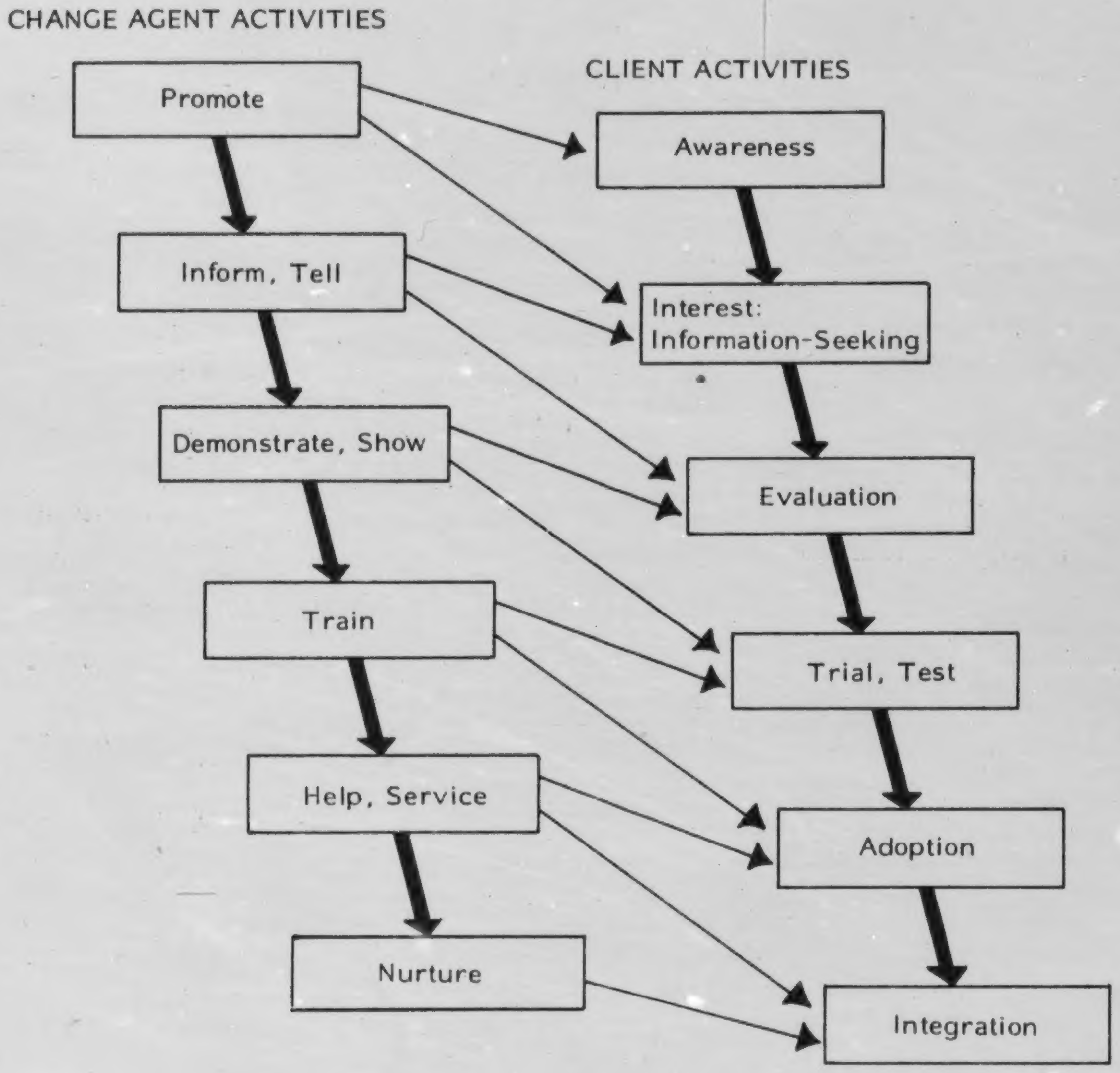


Figure 4

Coordinating Change Agent Activities
with the Client's Adoption Activities

CHANGE AGENT ACTIVITIES
CLIENT ACTIVITIES
Promote
Inform, Tell
Demonstrate, Show
Train
Help, Service
Nurture
Awareness
Interest: Information-Seeking
Evaluation
Trial, Test
Adoption
Integration

Awareness

At the beginning of your contact with a potential adopter, your primary objective should be exposure. You want to make sure that he hears and sees your message and that he develops some conception of what the innovation is about. The image you convey of the product should be clear and positive. Most of all you want to instill curiosity, a motivation to seek more information. There needs to be something in this initial message that will engender interest. Therefore, the message should be brief, interesting, easy to understand, and in some way rewarding.

Interest

During the "interest" stage you should encourage the individual to come to you for facts and to become actively involved in the search for information. If he is really interested, the individual will also seek information from other available sources (most commonly from his associates). You should promote group discussion, not only as a means of satisfying the need for information but also, as an opportunity to air doubts and to mold positive attitudes about the innovation.

Evaluation

As the individual begins to decide whether or not to try the innovation, he will continue to seek information. At this point an attempt should be made to provide information which will enable him to envision the innovation applied to his own situation. An aid in this type of communication is a demonstration of the innovation in the home environment under conditions that are natural to the potential user. If the individual is shown how the innovation will work for him, he will be more inclined to make a favorable evaluation.

Trial

Further demonstration will be necessary as the individual begins to try to put the innovation into practice. He will need training to fulfill his new role or to carry out the new activities. In the trial stage, the possibility of experiencing failure becomes very real; hence, the potential adopter needs maximum support and encouragement from the change agent. You should also do what you can to help the user evaluate his own experience; the results of his trial may not be immediately apparent or clearly appreciated unless you can point them out.

Adoption

After he has tried it, the client is in a position to decide whether to adopt or reject the innovation; a decision to adopt however is not the end of the story. The adopter may encounter difficulties in trying to carry out his or her intention, and the change agent must be prepared to provide further training and encouragement. He must help the individual adjust to the new situation, and he must be ready to provide his services when problems and unexpected obstacles arise.

Integration

After adoption, a change agent can do a number of things to nurture integration of the new skills or materials into the day-to-day behavior of the client, such as: providing practice sessions, placing reminders in newsletters, and using brief follow-up questionnaires on the frequency with which the materials are used and on how useful the materials are perceived to be. Nowhere is the need for change agents inside the target audience more apparent than at the integration stage.

HOW GROUPS ACCEPT INNOVATIONS

It is impossible to understand how individuals adopt innovations without considering the social relationships and group structures which bind individuals together. The communication of innovations depends upon a vast network of social relationships, both formal and informal; a person's position in that network is the best indicator of when he is likely to adopt an innovation.

Common Things and Key People

A target group may be a number of people who have something in common. Typically, the people have backgrounds, interests, circumstances, values, problems, and, most of all, needs in common.

A social system is a group of people who have pooled their resources to satisfy needs they have in common. These common things bind them together psychologically so that "mine" becomes "ours" and "self-interest" becomes "our common interest." This arrangement is usually very beneficial for all concerned, but sometimes it gets in the way when new ideas and new ways of doing things are introduced from outside. When this happens, the members of the group have to decide individually or collectively whether or not the new thing (innovation) threatens the common good. At this point, all of the common values, beliefs, interests, and backgrounds become potential barriers to change.

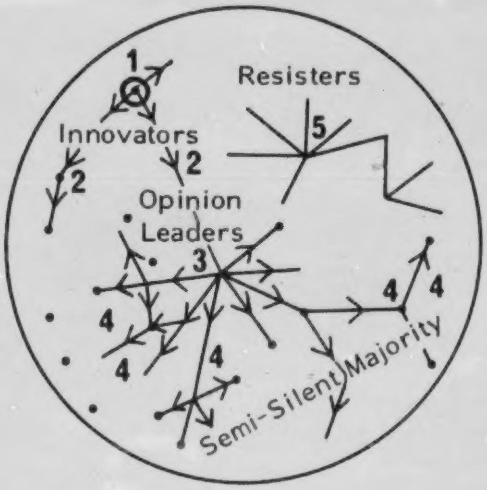
Social organization, by its very nature, is conservative and protective; it keeps some "innovations" out for the preservation of the common good, and when it lets them come in they are supposed to be "acceptable." Therefore, the structure of the group is designed to filter undesirable intrusions. Various members "sniff out" new ideas, expel dangerous ones, and make the final decisions about "acceptability" for the group as a whole. Sometimes people are appointed (or self-appointed) to fill each of these filtering functions.

The first step for the change agent who wants to gain the acceptance of the group is to identify the most important barriers and the kinds of filters that are used to maintain the status quo.

Diffusion of an innovation begins slowly with the acceptance of the idea by a few key members of a community. From then on, it spreads more rapidly, usually through word-of-mouth contacts between friends, neighbors, and relatives. This person-to-person process is very effective; once it has started and there are clusters of people who accept the innovative idea and are "talking it up," it gathers momentum. A chain reaction seems to begin once this "critical mass" of key individuals has formed. There is a rapid upswing in the rate of acceptance until a large majority has been won over.

Figure 5

The Chain Reaction of Innovation Acceptance: Three Key Types of People



Stage I.	Origin of the Innovation: (by invention or importation through an Innovator).
Stage 2.	Diffusion to other innovators and some key opinion leaders
Stage 3.	Spread from key opinion leaders
Stage 4.	Spread from secondary opinion leaders to the majority
Stage 5.	Acceptance by subnetwork of resisters (sometimes acceptance never occurs)

Three types of people play a significant part in promoting group acceptance. These are the "innovators," the "resisters," and the "leaders" (Figure 5). Because the characteristics of the three types of people have been studied extensively by social scientists, we are in a position to understand who they are and how they work, regardless of the particular innovation with which we are concerned.

The Innovators

Innovators tend to be intelligent and risk-taking: they travel a lot, they read a lot, they depend on outside sources of information, and they are usually very receptive to influence by outside change agents. They also tend to be on the social periphery of their home communities. They may be viewed as "odd balls" or mavericks, and they do not usually have a great deal of direct power or influence. Hence, they can be both assets and liabilities to the change agent. They commit themselves to new ideas and are willing to stand up and be counted even though they may be risking the scorn and ridicule of others. If they have stood up too often for lost causes, however, they may not be effective allies.

The Resisters

Many social systems also contain some members who assume the active role of resisters or critics of innovation. They are the defenders of the present system--the self-appointed guardians of moral, ethical, and legal standards.

Resisters of various orders have been very successful in preventing or slowing down such diverse innovations as the fluoridation of community water supplies, urban renewal, the integration of neighborhoods, and the invasion of certain civil liberties by such means as wire tapping and indiscriminate school testing. From the diversity of these issues it should be evident that the resisters do not all march under the same banner. They are a mixed group ideologically even though they tend to function somewhat in the same way. As preservers of a social order, they play a big and useful part in our society; they resist intrusions from alien influences; they are the antibodies in our social bloodstream.

The Leaders

Many studies of how groups accept innovations have singled out one very important social role: the "opinion leader." Opinion leaders are found in any community, and they are the key to the growth of any movement. Study after study has shown that certain influential people are held in high esteem by the great majority of their fellows. These people tend to have control of the wealth and power of society. They are usually not the first people to try out new ideas because they need to maintain their standing with their followers. The opinion leaders listen to both the innovators and the resisters so that they can better size-up a developing situation. They watch the innovator to see how the idea works, and they watch the resister to test the social risks of adopting the idea. In many cases, they are happy to have a part in these changes because their continuance in power rests upon their ability to judge innovations. They want to be champions of the innovation whose time has come. In other words, they must be able to adopt new ideas at the point when those new ideas become popularly feasible

Leadership of any kind, whether it be formal, informal, administrative, or elective, is of critical strategic importance in a change program. The school superintendent, the principal, the esteemed senior teacher all have "opinion leadership" with a wide range of innovations. Some act as *legitimators* making the majority feel that it is OK to try something out, that the axe won't fall. Others act as *facilitators*: they approve and reward the innovators by getting them clearance, providing funds and release time, and generally making innovation easier; and they encourage others to follow their example. Still others serve as *gatekeepers*, opening up (or closing off) access to needed resources, funds, outside consultants, training courses, etc.

HOW THE CHANGE AGENT CAN WORK TO GAIN GROUP ACCEPTANCE

The change agent can use knowledge of the group to plan and carry out an effective strategy for gaining group acceptance. Before a strategy can be planned, however, he must have some special types of information. He must again make a diagnosis of the client system, of the forces for and against the innovation. There are two key questions he should ask when gathering information to plan a diffusion strategy:

> What are the most important *common things*?
>
> Who are the most important *key people*?

To answer each of these questions, you may find it helpful to draw up a rating form on which you can identify and compare the forces which are acting for and against the desired change. To analyze the "common things" you might make two columns on a sheet of paper, one marked "forces probably favoring this innovation" and the other marked "forces probably opposing this innovation." Under these headings, you would list as many of the group characteristics as you can think of which might affect acceptance: e.g., commonly held values and beliefs, characteristic modes of thought and behavior, shared circumstances, common needs, and commonly perceived group objectives.

When you have identified a number of characteristics, you should rank-order them in terms of relative importance and the relative ease with which they could be altered. Such a list will provide some good guidelines for an action program designed to improve the chances of acceptance.

You might also try to draw up a list of individuals who could fit under each of the headings: "innovator," "resister," and "leader." The innovators are probably the easiest people to identify. Some of them will already be working with you as "inside" members of the change team. Others will have been in touch with you and will have been vocal in their support. Still others may be identified as leading spokesmen for one or another of the issues listed under "forces favoring."

Your list of "innovators" should be rated on a number of characteristics, such as: (1) the innovator's degree of understanding and sophistication about the use of the innovation, (2) the extent to which innovators are representative or typical of the client system as a whole, (3) the amount of direct influence ("opinion leadership") which they can exert on other members of the client system, and, most importantly, (4) the amount of contact and influence between them and the leadership.

"Resisters" may be people who have previously spoken against the innovation, or people who have come to you with objections. They may also be spokesmen who personify some of the issues which are "forces against." It is important, however, to try to identify resisters before they become vocal and committed to a position on the particular innovation. Resisters, like innovators, should be judged for relative sophistication and influence.

Finally, as part of your diagnostic analysis of the acceptance problem you should take an inventory of the leadership. Who are the formal leaders and gatekeepers for this type of innovation? Who are the informal leaders. The example-setters? The facilitators? The "legitimizers"? The leaders should be rated on such dimensions as (1) their attitude toward both innovators and resisters, (2) their visibility, (3) their relationship to one another, and (4) their ability to lead.

Using the Key People as Stepping Stones

A number of social scientists have described innovation-diffusion as a two-step process. In the first step, outside information about the innovation reaches the opinion leaders. In the second step, the opinion leaders pass on the information to their followers by word or example. Although this process sounds simple, it will only work if two conditions are present in the client system: first the opinion-leaders must be innovators or innovation-minded; and second, they must have very good relationships with followers throughout the client system.

As a change agent, you usually cannot count on either of these conditions, and it would be dangerous to assume that they exist. However, you can use this basic concept of "steps" effectively if you put together all the information from your diagnosis and analysis of roles. An adequate strategy may have to include not one but four sequential steps to gain group acceptance.

How this type of step strategy might work is suggested in Figure 6.

(1) Introduce the innovation to a core group of "innovators." Get them to

try it out, to become sophisticated in its use, and to demonstrate it to others.

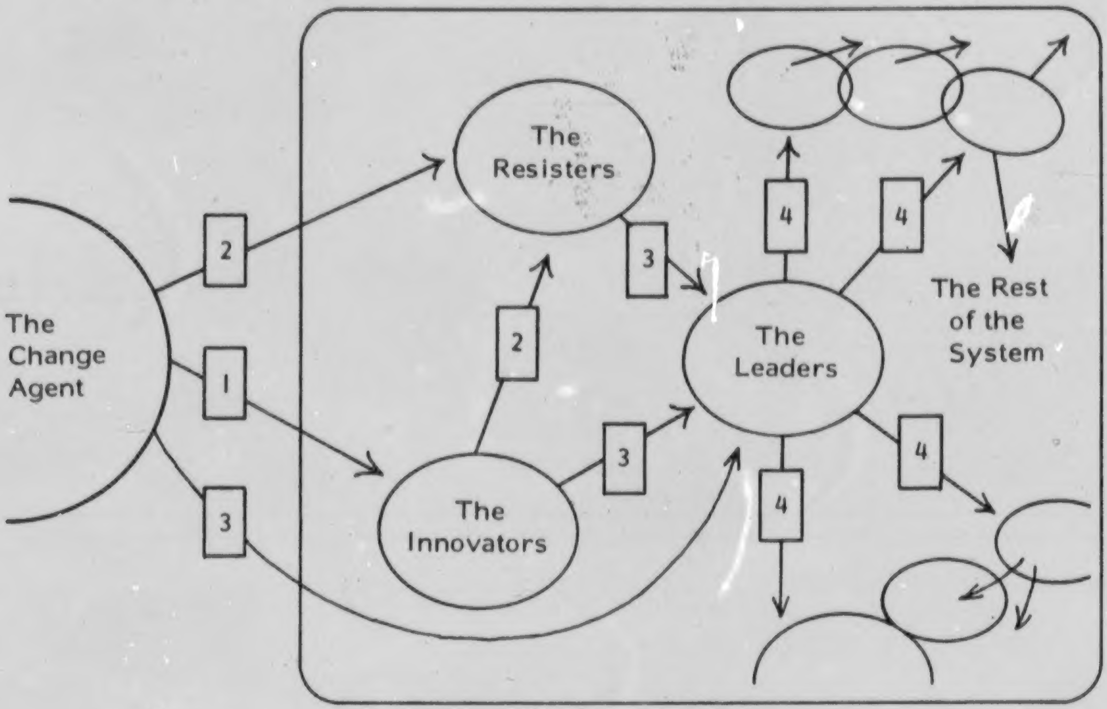
(2) Begin to work with some of the concerned citizens who are potential but not-yet-vocal resisters; answer their questions and show them by demonstration that the innovation does not violate established values and does not threaten the survival of the system as they know it. If you do not receive any cooperation from resisters and if they are already vocal and mobilized, you should at least do what you can to protect the innovators and to make the innovation less vulnerable. This means being persistent, realistic, and scientific in your approach and having sound and well-reasoned answers for legitimate questions. With these safeguards, you may not be able to silence your detractors, but in many cases you may be able to disarm them and prevent them from turning the rest of the community against you.

(3) Bring the innovation to the attention of the leaders, allowing them to observe live demonstrations by the innovators and to sound out the reactions of potential resisters.

(4) Allow the leaders to lead the way to acceptance by the rest of the system. If possible, get them to publicly commit themselves, and to organize into supporting and endorsing committees.

Figure 6

A Stepping-Stone Strategy for Gaining Group Acceptance


The Change Agent
The Resisters
The Innovators
The Leaders
The Rest of the System
1
2
2
3
3
3
4
4
4
4

In following any strategy to gain group acceptance, do not forget that groups are made of individuals and that each individual has his own step-by-step process of moving toward acceptance. Thus, while you are working on "evaluation" or "trial" with innovators, you may need to be working on "awareness" and "interest" with leaders. A good program should be planned to provide each set of individuals with the kind of information for which they are ready at a given point in time.

SUMMARY

The main points of this chapter are summarized in Figure 7. Starting in the center of the diagram, think of each member of the target system as a problem-solver in his own right. What are his or her needs? Where is he or she in the process of seeking solutions to those needs? What ways can you enter his or her situation?

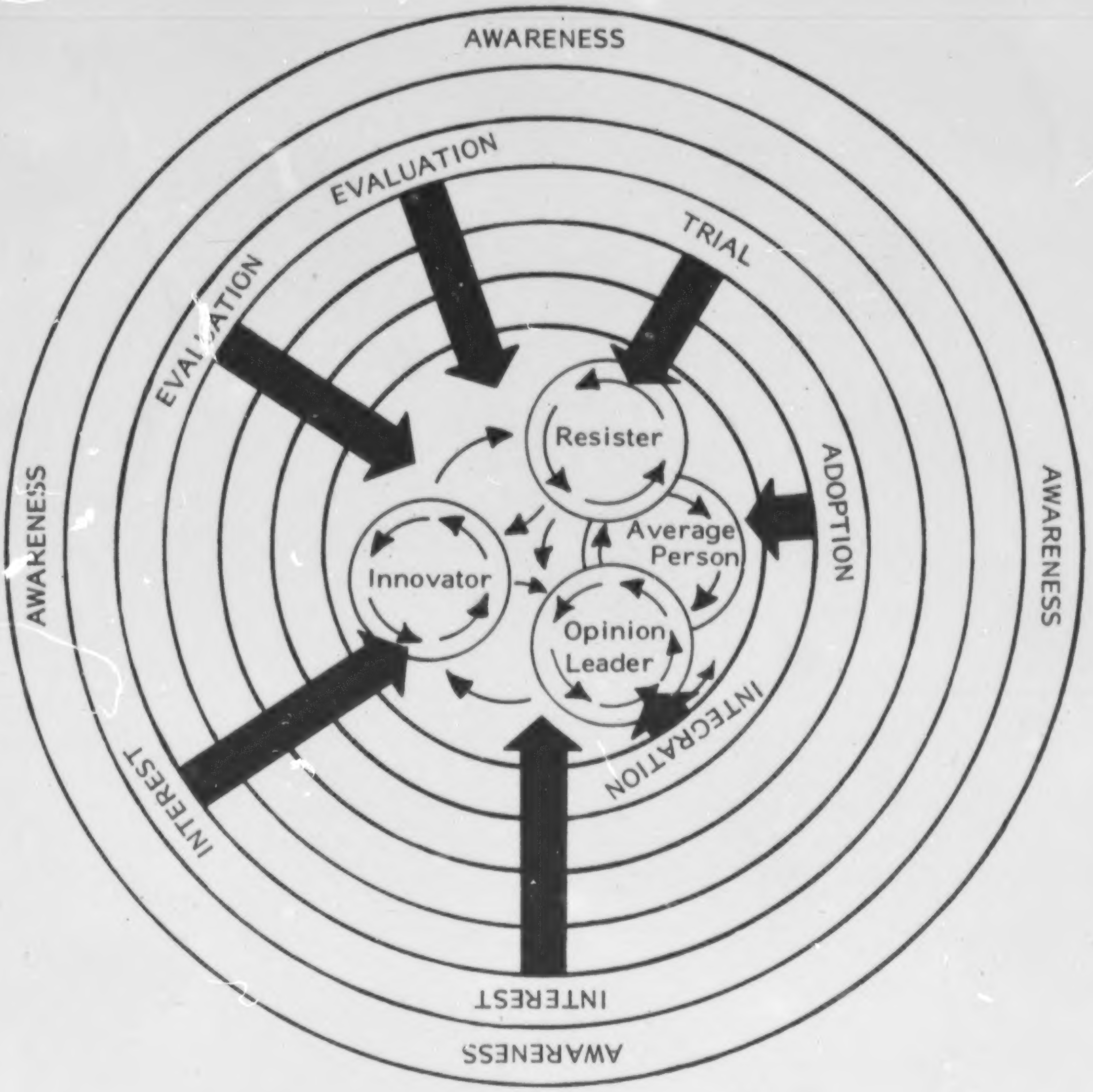
Second, think of your target as a network of problem-solvers who are tied together by common needs, values, and situations. Within this network some people are innovators; they reach out for new ideas all the time, and can be your first allies if you can find them early. There is conversely another type of person who is always wary of new ideas and warns the rest of the system about what might be dangerous or disruptive to the status quo. You should try to identify these people, and if you can, make a friendly approach to them. Show them you mean well and have some ideas that they might find useful. Finally, single out the opinion leaders: the influential people to whom the majority turns for leadership. Plan your delivery strategy especially for this group. Start by building the opinion leaders' awareness of the innovation. Then gain their interest and win their approval.

Throughout this process, respect the integrity of the system you are approaching. Consider the needs of the people in the system as the paramount concern, not your innovation; and if there is not a good fit between their needs and what you have, consider ways in which your program could be adapted or redesigned to fit their situation.

For further reading on this topic and an explanation of how a program of change can be planned sequentially to meet user needs, you might consult THE CHANGE AGENT'S GUIDE TO INNOVATION IN EDUCATION, Ronald G. Havelock, Englewood Cliffs, New Jersey: Educational Technology Publications, Inc., 1973.

Figure 7

Outline of a Total Delivery Strategy


AWARENESS
EVALUATION
EVALUATION
TRIAL
ADOPTION
AWARENESS
AWARENESS
Resister
Average Person
Innovator
Opinion Leader
INTEGRATION
INTEREST
INTEREST
AWARENESS

The large arrows in Figure 7 indicate the major steps in gaining adoption of new ideas from individuals or from groups. First, one must establish broad awareness of what the innovation is all about, what its goals are and what its consequences will be. This can be done using mass-media and typical advertising techniques. The more intensive stages of developing interest, mental evaluation of the idea, trial, permanent adoption, and finally integration into ongoing activities and structures require successively more tailored and personalized efforts. These efforts will vary depending on whether the immediate "target" is the group as a whole or particular key persons.

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Among Dr. Havelock's many publications are Planning for Innovation (available from the Institute for Social Research; Ann Arbor, Michigan; 1969) and Educational Innovation in the United States (Volume 1, Survey; Volume 2, Case Studies). The latter work was produced for the National Institute of Education in 1974 and is available either from ERIC or from CRUSK-ISR at the University of Michigan.

4 DEVELOPING AND REPLICATING PROGRAMS IN EDUCATION

David P. Weikart, Ph.D.

FROM INNOVATION TO MODEL PROGRAM TO REPLICATION

Educational models develop in a number of ways. Frequently an innovation results from observations or conclusions derived from personal experience--the Montessori movement and the reading system advocated by Sylvia Ashton Warner (which evolved from her efforts to teach Maori children in New Zealand) are excellent examples of such a process. Many of the best educational procedures are the outcome of the practical experiences of teachers; others are the product of theory drawn from either educational philosophy or research. The currently popular operant conditioning procedures which are used in many educational programs, for example, are based on learning theory. Our own program, the High/Scope Cognitively Oriented Curriculum, is derived in part from Piaget's child development theory.

No matter how a program evolves, there are limitations to its usefulness for general replication. For innovative ideas to become replicable models, one ingredient is a necessity: time. The model must evolve over time as a product of interaction among participants at the development site; pressure from staff, children, parents, and the community affects changes in the model. This process of accommodation is critical in creating a useful model, though the originators of the model are often hard pressed to preserve its integrity against the pressure of user groups. A model, to be effective, must be open to circular interaction (i.e., all participants have their input) as opposed to linear interaction (i.e., the developers pass down their orders to the implementors and users). Perhaps no other single factor so impedes the development of replicable programs as the commitment by most institutions and staff to the linear mode of interaction.

Once a model has been developed and validated through experience and experimental studies, the process of evolution continues as the model is disseminated to the field. The model must face the same circular pressures at user sites as it did in the original development site. Models that permit the adaptation of their systems to local needs are superior to (more replicable than) models that must be applied intact as developed. Pressures from cultural or ethnic groups, from replication-site staff, and, very importantly, from the "climate of the times," force even the most well developed models to adapt and change.

Successful development and dissemination of a model, then, involves a circular interactive process that shapes the program both during the original development and later during the replication phase. Again, time is the catalyst for this evolutionary shaping.

Even after an effective program is developed and proved useful through carefully controlled research, the problems involved in replication at distant sites often seem overwhelming. While to the developer the evidence supporting his program is such that the model should be adopted by those concerned with educational improvement, adoption is more easily spoken of than done. One of the principle problems interfering with widespread adoption is institutional inertia. The problem with bureaucratic systems is that they are maintenance systems designed to accomplish the *original* mission of the institution; they are not designed to support new procedures of operation or innovative ideas. Administration is devoted to maintaining the institution as it is (or was) rather than to facilitating a transition to what it might be. The capacity of most organizations to adopt innovations is limited, and often this limitation is underrated by those concerned with change. This is especially true for schools in which socialization and maintenance of the status quo is a rule. Systemic change in public education must be introduced carefully and with full recognition that innovation is against the nature of the system.

Resistance to change is present, of course, at the individual as well as the institutional level. Teachers who fit the traditional stereotype are often reluctant to alter their own style and accept new procedures. In a sense their loyalty rests with the philosophy of the institution where they were trained. Sometimes the problem is further complicated by in-service training programs offered by other institutions; frequently these programs are in conflict with goals and methods of the innovative model. Head Start has had its share of such conflicts.

Teacher unions, which have become increasingly important in education within the last few years, have also been a source of problems in replication.

Especially in large cities, the regulations of the negotiated master contract often leave the model sponsor with few options. If conflicts arise, there is no recourse to personnel changes. Meetings cannot be held before or after certain hours; teachers cannot convene for discussions except at limited and specified times; costs are set for extra work; and the entire effort can easily be hindered by structured restrictions. In some states, the laws governing education are also detrimental to innovation, because they cannot be altered to meet new demands. Ironically, the rules and laws that have been established to protect teachers from abuses of the past may also serve to freeze the potential for change in the present.

Most sponsor groups involved in replication are aware of another, more subtle, impediment to successful replication: the attitudes of some staff at the replication site. Sometimes these people ascribe superhuman powers to the sponsor; in effect, they say, "O.K., here I am, now save me." Because the innovation often negates their present procedures, *they* feel negated. Some rebel and refuse to be "saved" through the new methods. These attitudes, of course, are unfortunate, but they are a common reflection of the heightened emotions evoked in the course of altering a person's work. The problem for the sponsor is multiplied if he gains not a coworker but a dependent. Dependency may be expressed as contrition ("Tell me what to do now that I know I was doing it wrong before") or as helplessness ("Give me the materials you want me to use, I know these don't work"; "I did what you told me and it didn't work, now what should I do?"). Most staff at replication sites do not respond in this way, but "sponsor as deity" is a genuine problem. It is a problem that can be reduced by making every effort to involve the replication staff in their own adaptation of the model.

Appropriate ongoing staff training at the replication site can also reduce problems of too much or too little dependence and should be given top priority. Initially, many sponsors in the Planned Variation Head Start and Follow Through experiments felt that pre-service and summer-institute training were sufficient. This has not proved true. Several years ago members of my staff returned from a week-long workshop at a new site with glowing reports of the effectiveness of the workshop and the unusual cooperation of all the site personnel. The evaluations of the workshop by the participants were equally enthusiastic. A month later, on a routine site visit, almost nothing could be found that reflected the workshop activities. Whether a sponsor offers a programmed, directed-teaching approach or a more flexible "open" approach, pre-service training in itself is not enough to get a new program off the ground. What, then, should be done in the way of training?

The first thing is to eliminate wasteful training procedures such as summer institutes. Brief pre-service workshops should be limited to orientation and introduction to the methods and theory of the program; they are never a substitute for on-site, in-service training and supervision. Training distributed over the year in a series of well-focused workshops within the context of ongoing classroom supervision permits the program to be presented in small and practicable steps that can easily be assimilated by the teaching staff.

Many sponsors have found it expedient to focus the major part of their effort on the training of local supervisors who become specialists in the program. Their function is not to act as administrative authority figures but to assist the sponsor in implementing the program; it is through these "curriculum assistants" that the replication of the model program proceeds.

To aid in the training of curriculum assistants, most sponsors have begun to develop training materials that supplement but do not replace person-to-person communication. It is important to note that most sponsors initially felt that training materials would be sufficient in themselves to introduce and maintain change at the replication sites. It was surprising to find that such materials were not even adequate for training in the theory of a program, much less the practice. Further, even programmed classroom materials for children, which the teachers simply had to read in a prescribed style, could not be implemented correctly. Ideas as well as methods are difficult to transmit, particularly if the transmission is attempted through "media" alone.

The conclusion drawn by most sponsors is that ongoing in-service training is essential for model implementation. Further, such training must be a permanent feature of the program. It may well be that some of the traditional methods of education have been found wanting, not because they are inherently "wrong" but, because training stops when a diploma is handed to a teacher.

While the development of effective training methods and the commitment to in-service training on a permanent basis are the touchstones for replicating model programs in education, the high turnover of staff in most school systems is one uncontrollable factor that can thoroughly disrupt the process. The implications of staff turnover for training and for quality implementation cannot be overestimated.

In the final analysis, though, replication is difficult because the very system we are attempting to change entraps us in its rituals. After several meetings with a self-satisfied staff, for example, a field consultant may get the message that his time would be better spent in other ways; similarly, a meeting with a superintendent of schools may produce a lengthy list as to why little can be accomplished, given the pressures and limitations facing the school system. At the center where the new program was developed, the system was supportive; at the replication site, support is often lacking. The uncertainty, the distance, the change in staff, the difficulties in introducing the desired changes, etc., all conspire to make replication a difficult process; but certainly, when it works it is a significant achievement.

HOW PROGRAMS CAN REMAIN EFFECTIVE AFTER THE SPONSOR LEAVES

Various models require various lengths of time to reach an implementation level which is satisfactory to the sponsor; but most do reach the point where the program is effectively executed, and the sponsor feels the local staff can carry on by themselves. As "generations" of staff become removed from the initial project, however, effectiveness often declines. Major contributing factors to this decline are institutional changes, jurisdictive fights, administrative staff changes, and the shifting sands of politics. Survival of an innovative program is continually threatened. What follows are some suggestions for practical means of ensuring the survival of new programs once they are on their own.

1. During the initial contacts and establishment of the replication ties, do not compromise the basics of the model any more than necessary. During the initial period of negotiation, the institution accepting the replication

is at its peak of interest in the model, and the conditions that govern implementation must be outlined and agreed upon at that point. These initial agreements should emphasize various points of training and supervision, administrative support to permit the freedom necessary for operation, staff assignments, relations with various community groups, funding responsibilities, equipment and materials that must be provided, travel arrangements that are unique to the project, and role definitions for both the sponsor and replication-site staff.

These agreements may take the form of contracts that are legally binding, or they may be memos of agreement between two parties. Some sponsors have taken the position that their sponsorship is contingent upon certain conditions being met and upon required performance standards being demonstrated; they leave open the possibility of terminating their sponsorship at any time. This alternative must be considered as a possibility, especially if the sponsor's professional reputation is riding on carefully executed research at the replication site. But the will to make a program work for children is what matters most; without that will, no contract will serve as enforcer.

2. Consider some form of certification of the staffs at the replication sites as a necessary stage before withdrawing from the sites. In-service training should be oriented toward competency on a performance basis. While effective assessment of performance is extraordinarily difficult at this time, procedures are being developed. The Office of Child Development's "Child Development Associate Program" is an example of an attempt to use competency-based assessment for the staff of national Head Start centers.

Curriculum-specific observation instruments are being devised by many sponsors and several national assessment groups.

3. Consider licensing of the sites. Here we are talking about licensing that is specifically for the model being replicated. This, of course would be in addition to licensing for health and fire-safety standards and accreditation by the state. Program-specific licensing would be contingent upon the project demonstrating that it includes the essential attributes recommended by the sponsor: Does the project have the recommended number of staff certified by the sponsor? Does it have the required materials and equipment? Is there an effective in-service training program? Is the administration of the project adequate? Do the evaluation results reflect a program that is being implemented according to design?

4. Provide printed and audiovisual training materials to the replication sites. While it is true that such materials cannot "carry the message" alone, it is also true that without sufficient supportive materials the on-site supervisors cannot effectively train the staff. The function of the materials, in part, is to standardize the message given to program participants. The materials provide a focus for discussion and practice.

5. Maintain professional contact with independent local sites. This contact could be in the form of periodic conferences, visits from the local sites to the sponsor's headquarters, visits between sites implementing the same program, or periodic visits from the sponsor to the sites. The initial sponsor-client relationship should be altered to conform to the independent status of the site. What is needed at this point is a relationship between

equals carried on through a sharing of experiences and findings. The sponsor should make every effort to keep the local sites updated on model development and continuing replication efforts.

The task of the sponsor's replication team is to support the development of independent centers that can demonstrate the viability of the original educational idea. This task calls for dedication on the part of both the sponsor and the local staff fay beyond what is normally expected. While there are many reasons for replications to fail--they usually do--failure is not inevitable. What is needed is professional understanding of the problems, hard work to resolve the difficulties, and a willingness to greatly broaden the concept of cooperative action by all concerned with improved opportunities for children.

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ASSESSING THE IMPACT OF REPLICABLE PRODUCTS ON TARGET AUDIENCES

Ernest R. House

Dick Woolworth did what everyone else only talks about--he built a better mousetrap. As president of Woodstream Corporation, a manufacturer of the old kind of mousetrap (in which you catch your fingers), Woolworth put his company's resources into researching the sleeping, eating, and crawling habits of mice, and he engineered a brand-new trap that was much easier to set and more humane to the mice. A top product designer was hired to make the trap modern enough so people would notice the change. The result was a plastic apparatus that looked something like a sardine can; it was constructed so that when the mouse entered an archway, he tripped a wire which snapped up from below and choked him to death.

Elated at the invention, the company not only told dealers about the new trap's efficiency and convenience; they flooded the shelves of hardware stores with the devices only to have them sit unsold for a year. As the *Wall Street Journal* noted, "The world yawned." After a painful readjustment, the company is once again doing well with its old traps. Observers have offered several explanations for the failure, among the more astute of which is that "It is women, not mice, who buy mousetraps." Some people hypothesized that women do not like to take dead mice out of traps and that the new traps were too fancy and too expensive to throw away. Whatever the reason, Woolworth's story is being told in business conventions across the country, to his chagrin, as a classic example of how not to market a product (Sansweet, 1970).

As this anecdote illustrates, it is not enough to build a perfect product (be it a mousetrap or a project) and expect the world to beat a path to one's door. To be successful in replication one must advertise, proselytize, and actively engage in outreach activities. The necessity of making claims and promises to get support and to disseminate the good features of the project, however, often lead to the problem of proving the validity of the claims.

Recently I was comparing testimony given to a U.S. Congressional subcommittee on behalf of a new computer-assisted instructional system with a speech by a former Illinois governor which was given more than ten years ago in support of a state-wide program for gifted children. I was astounded to find that the claims made for both innovations were essentially the same. Both were advertised as individualizing instruction, attending to the specific needs of particular children, reducing costs, and addressing an important national need. How could all of this be? Obviously the claims were necessary to gather needed support, and they were probably the only way of attaining such support.

Yet, over time, one would expect such frequent claims to produce some skepticism among funders and decision-makers. There are signs that such a time may be arriving, even in special education. At a conference in the Spring of 1973, the Chairman of the Illinois School Problems Commission, who is a teacher as well as a legislator, said: "In my opinion, special education is the biggest educational rip-off in this state. I'm tired of spending $1,800 to teach a kid how to tie his shoes." The time is near when our claims for education must be substantiated by evidence. The dilemma of the project director is that, not only must he make the claims, he must support them with data. We have been better at the former than at the latter.

It seems to me that the First Chance centers must collect two types of evaluation information. One set of data must relate to how successful the educational program is in dealing with children and parents, the main recipients of its services. The other part of the evaluation must deal with how successful the model is in replicating its activities in other projects. In this discussion, I will focus on assessing the impact of the center's replication activities, though some comments will also be pertinent to program evaluation.

ASSESSMENT PROBLEMS

The mousetrap anecdote illustrates that the audience to which one disseminates an educational program, whether for mice or women, is a critical consideration; the audience is no less a consideration in deciding how to evaluate the project. What kind of information to collect, how the information will be collected, how to analyze it, all depend in good measure on the audience for whom the evaluation is intended. So it is incumbent upon the project to collect information that the primary audiences find relevant, credible, and hopefully persuasive. In the case of assessing the outreach activities, I think the primary audiences are fairly clear: the Bureau of Education for the Handicapped (BEH) staff wants to know if the individual center is successful;

higher-level decision-makers within the Office of Education, other government agencies, and the Congress want to know if the whole Network is effective; and the project director wants to know if his center is doing well and why.

Evidence comes in degrees of *equivocality*. For the audiences mentioned, except for the project director, the most unequivocal evidence would be for the project techniques to be implanted *in toto* in another location and for the test scores of children in that program to rise dramatically as a result. Unfortunately, such evidence is almost impossible to provide. Test scores are not really very good measures of what is taught in school (Stake, 1973), although people usually accept them as such. There are also many external factors affecting test scores that are dependent on the local situation.

Even if one accepted a test as a direct measure of what one was teaching, a dubious decision, outside influences are so strong that one would have to establish a very careful control group to ensure that gains were attributable to the new program and not to something else. Practically, it is very difficult to establish such a randomized control group. For example, the proper procedure would be to select twice as many qualified children as would be needed for the treatment group and randomly assign half to the experimental group and half to the control group. Seldom is this procedure practical. There are also some moral problems. A very young deaf child who receives no treatment until he is somewhat older because he is in a control group may be in great trouble indeed.

In the face of these experimental-design problems, researchers often resort to a pretest-posttest design. But for an audience with any sophistication at all, such a design has little credibility. Students may score better simply because they took a similar form of the test twice or simply because they are older and more mature. There are ways of surmounting some of the design difficulties (see Campbell and Stanley, "Experimental and Quasi-Experimental Designs," 1963). Perhaps the most promising efforts are those examining the so-called "time-series" design which looks like a pretest-posttest design except that the measure is administered several times both before and after the treatment, eliminating many of the questions generated by the simpler design. For the moment there is no good solution to the design problem.

Why then are we stuck with an invalid measure like tests and an impractical design we cannot implement? The answer lies in the history and formative forces that have shaped the evaluation field over the last fifty years. Why this happened I have considered in another paper and will not repeat here (House, 1973); but it reflects the role that evaluation and testing (almost synonomous terms until the last few years) have played in the general society.

Equally damaging to the chances of finding positive results from outreach activities are the unspoken assumptions on which most replication efforts are based. The "generalizability" of the project is assumed; the project can be duplicated pretty much "as is" in a foreign setting; the same techniques can be used to produce the same results. In other words, the project can be transferred to another setting and function in much the same way as it did at the primary setting. Closely allied to this idea is the assumption that the results of the dissemination effort can be gathered and measured by a common instrument. Let us assume that the original model project can show gains on an achievement test of some kind. If the total project can be duplicated intact elsewhere, should not the new project produce the same results? If not, then something must be wrong with the new project or with the dissemination effort. Impeccable reasoning! If the United States does well with a democratic form of government and gives it to the Vietnamese, the Vietnamese will do well also, right?

The doctrine of direct transferability is so deep-seated in our thinking that it is extremely difficult to uncover and assail. It has informed (I should say misinformed) federal policy for many years and continues to do so today. The empirical ruins of this doctrine lie all about us. Evaluation study after study has failed to find significant results from massive change programs like the First Chance Network. Almost invariably when the program is examined to determine "why" the programs have failed, the answer is that the model programs were never faithfully replicated. Instead of questioning the basic doctrine, the recommendations are for new dissemination techniques that will hopefully be successful, a new plan to launch larger experiments, or a plan to control the hamlets.

ASSESSMENT IDEAS

What does this have to do with the immediate practical problem of assessing the replication impact of your center? A good deal, I think. Properly conceived, a program is a complex and vaguely defined operation which works within a particular context and under the peculiar conditions of a unique setting rather than a neatly packaged, precisely defined machine which someone can pick up and apply under different sets of circumstances. What one school finds useful may be impossible to implement because of building, equipment, clientele, or personnel inadequacies. Each school must work with what is available and can deviate only so far from its circumstances.

It will be a rare project that wants to or can duplicate a model program exactly, simply because local factors will greatly influence all outcomes. The effects of replication activities will be quite different from place to place.

The impact of replication activities should be assessed with the same care that is used in measuring the consequences of an innovation within a complex social system. One is not able to predict in advance exactly what consequences the program (or more accurately the part of the program adopted) may have in different settings. The same program will have different effects from school to school. As an extreme example, consider the introduction of steel axes to a primitive culture using stone axes. An individual could construct a cognitive test on axes and, assuming the language-coding problem could be solved, he might find the primitive culture knew more about axes than do advanced cultures. Better, one could establish an index of ax-use and find out whether or not the natives are using the steel axes. This is about as far as most evaluations now go.

What would one miss? He would miss many things of importance. A study of steel axes newly introduced into a primitive culture was done, and it was found that the steel axes wrecked the primitive economy, destroyed the kinship structure, and sent many of the women into prostitution (Rogers, 1971). I hope your programs have better effects. The point is that one must look for consequences that one cannot always predict, and some of these may be bad. The ax study was done by an anthropologist using participant observation. Should one hire an anthropologist? That is exactly what the Experimental Schools

Program in Minneapolis has done. The anthropologists are following forty families or so and looking for the effect of alternative education options on them. I have thought before that the true effects of special education programs are registered as much in the family as on the individual child, so this is not a bad model. Although anthropologists work cheap, you cannot afford one on your budget.

Another way of examining consequences is through interviews with personnel. Last year I evaluated the introduction of a computer-based instructional system into six junior colleges. Although the study covered only one year, I did about a hundred interviews. This procedure is probably too expensive for a small project. (Incidentally, I found that the consequences of introducing such an innovation were organizationally-dependent; that is, something substantially different happened in each junior college. For example, the informal political structure of each junior college had a great deal to do with the reception given the computer-assisted instruction (CAI) system.)

Let us return for a moment to the classic evaluation paradigm, the control-group design with test scores as the outcome measure. Tests are constructed to maximize reliability and validity; when one gives a test under varying conditions, he should get as close to the same results as possible. An important way in which accuracy and stability are achieved is by defining an extremely narrow domain of behavior and measuring that domain with many items. This technique provides great depth and maximizes differentiation among people. The same methods are used to construct other psychometric instruments like attitude measures. This stable probe of a very narrow area is opposite to tests which look for broad-range consequences over time.

If one is constructing an attitude measure to assess some of the impact replication has had at the project, one's entire resources will be poured into examining a narrow range of activity which is specified in advance. This use of resources works against finding positive results. Theoretically one could construct many such measures and assess a wide range of activities. Economically, however, constructing and validating many such instruments would cost more than the entire project. At the same time, the major audiences for the evaluation are expecting evidence which supports the claims that were made to receive aid. They also expect data to be "hard data": that is, something reducible to numbers, preferably a gain in student performance. The result of those pressures, either knowingly or unknowingly, is often to produce gains in such measures by judiciously selecting a non-randomized control group that will not do as well as the treatment group and by manipulating the test-taking behavior of the groups. For example, selecting an experimental group comprised of volunteers almost certainly means that the group is of higher socio-economic class than a control group which did not volunteer. The higher socio-economic group will perform better on most types of tests.

Especially in special education, it is possible to teach items very close to the test items and thus raise scores. I have noticed that many projects which claim to raise scores are doing this. It may not be a bad practice if one believes that the behaviors taught are vitally important. It does raise the question of what the gains in test scores mean since tests are assumed to sample a domain of behavior and are expected merely to be an indicator of behavior in that area.

If the main reason for teaching the items is that they are test items which will raise test scores and presumably will indicate competency, teaching the items is questionable, although I can think of circumstances where I might condone such a practice.

So much for esoteric considerations! What is the box score? The project director and the First Chance Network itself have made some claim about the good the project and the Network will do. An increasingly skeptical audience, i.e. government decision-makers, demands evidences of good faith. If the project is evaluated by the classic evaluation paradigm, the results are quite likely to be negative. The project director might fudge a little and produce results which might persuade an unsophisticated audience but which will not convince a sophisticated one nor himself. Participant observation and extensive interviewing are probably too expensive for projects. In addition, government decision-makers have not yet accepted the legitimacy of "qualitative" data like case studies and interviews; they want something "quantitative," something objective. This practice, I think, stems from economists who have been influential in domestic policy-making the last several years.

In assessing the impact of his replication activities, I think the project director will have to accept evidence considerably more equivocal. If he has very many people to deal with, he probably will have to rely on a survey design and a mail survey at that. If he wants to discover diffuse, unspecifiable consequences, he will have to use open-ended items. Several years ago, when evaluating the impact of demonstration centers for the gifted, we had considerable success with items like this: "Please give a concrete, specific example of how you have changed something in your school or classroom as a result of your visit to the demonstration center."

In effect, we asked the visitors to give a critical incident of how their behavior had changed as a result of their interaction with the center. These incidents were then scored separately by three judges as to whether the example was concrete enough and could have resulted from visiting that particular program. For example, "We individualized instruction" would have been scored negatively since it was not specific enough to convince us that they had made some effort. This technique errs on the conservative side, because some people who actually did something will not take the trouble to write down an example. Neither will someone who did nothing be inclined to go to the trouble of making up a fake example and writing it down. How the judges assess the example and who the judges are is important in determining the credibility of the information. If it is to be credible at all, the procedure must be carefully controlled and written down, and the judges must be honorable men.

Besides being cheap, the procedure offers the advantage of producing results which can be presented in numbers and examples which can be categorized, if desired, according to types of effect. In writing up the report, the examples can be used as illustrations; this is an important consideration if you wish to enhance both the readibility and credibility of the report. Once the examples are quantified, it is possible to relate other variables to them statistically. For example, one might want to relate the number of visits model center personnel make to the replication site to the quantified examples.

Incidentally, with the demonstration centers we found that the main factor associated with the visitor replicating some part of the center's activities depended upon whether or not the center's personnel visited the replication site. In fact, I will predict that where you have the most intensive face-to-face personal contact with replication personnel is where your replication activities will be most successful.

The major drawback of the specific example technique is the failure to probe the depth of change. The technique asks for only one example. How much have they really done? One might ask for two or three separate examples as some indicator of depth of change. One might also think of some clever ways of getting at the depth issue. We tried some close-ended scales which specified the changes we expected to occur. In spite of good information on the centers and considerable statistical manipulation, those scales never worked for us. The fact is that the open-ended items are much easier to judge after the fact than are the various ambiguous interpretations the respondents read into the close-ended items.

In analyzing the data, there is also the problem that some centers work intensively with a few replication sites while others work less intensively with many more. In our study we handled this problem by establishing an efficiency and effectiveness index for the centers. The total number of people affected would be the center's effectiveness index. If a center had a smaller audience and worked with fewer people but was influential with those people, the center had a high efficiency index, which was computed by dividing the number affected by the total worked with. By the way, these studies are available in all their gory detail in three reports in the Educational Resources Information Center (ERIC) system (Kerins, House, Lapan, Steele, 1969; Kerins House, Lapan, Steele, 1970; House, Kerins, Steele, 1970).

Obviously a center which works with only six replication sites will have to find alternate ways of measuring its impact. In those cases I would suggest doing extensive interviews (or, more credibly, hiring someone to do them) to pick up the much more intensive effects one might expect from such concentration of effort. If one works with only one or two sites, he had better start thinking "case study." There are also other types of evidence one can accumulate to register the impact. Various written documents might be helpful, as would information on the numbers of children served by the new programs, the amount and kind of replication activity, even properly interpreted test scores.

Information which we did not find productive in the demonstration-center study included a rigorous description of the demonstration process itself and information from visitors that had come to the center. We spent much money and effort developing a rigorous participant-observation classification scheme on how centers treated visitors: what they told them, etc. This scheme had no payoff, mainly because the variables that influence replication behavior lie elsewhere. We also found that the demonstration directors were deceived by the comments of visitors to the center. While they were at the demonstration center, visitors were invariably nice, complimentary about the observed program, and enthusiastic about replicating activities in their own schools. Such feedback led the demonstration directors to believe they were having great effects. Later we discovered that such visitor enthusiasm had little relationship to whether the visitor implemented center activities at home. Watch this phenomenon; it is deceptive.

SUMMARY AND RECOMMENDATIONS

I have suggested that in assessing the impact of replication activities one look for effects of those activities on the replication sites. Those effects are likely to be diffuse and are likely to be unspecifiable in advance. Do not worry too much over the specific excessive claims you have made in order to get support. You could not meet those anyhow. Besides, you may have done many good things you never originally intended. These good deeds should be documented. It is not likely that one will find results with highly-focused psychometric instruments. Instead, one should use open-ended instruments that will pick up the diffuse and wide-ranging phenomena that vary from site to site. One should conceive of replication efforts as analogous to introducing an invention into a primitive society, an event that may have far-reaching effects. Those effects will be felt for a fairly long time. If possible, consequently, data should be collected at more than one point in time. Considering the primary audience, the results should be reduced to numbers if possible. Participant observation and interview data are the most thorough evaluation techniques available, but a survey of critical incidents is probably cheaper and more practical.

As a substitute for the classic control-group design, I have suggested a somewhat more equivocal survey design which calls for an honest panel to make judgments as to whether the critical incidents could conceivably have resulted from the model center's activities; this design could eliminate alternative hypotheses as to what actually caused the results. Of course, the more traceable the incident to the model center program, the more certain the cause. Scriven (see Popham (ed.), 1974) has elaborated and formalized this reasoning in what he calls a "modus operandi" procedure. For example, how do we know that the establishment of a new program for very young handicapped children is not the result of a new state law rather than of the replication activities of a particular model center? The more one is able to demonstrate a characteristic chain of events (a "modus operandi") leading from replication activities to the new program, the firmer the claim of center influence. For example, the more the new program looks like the center program, the more exchange there will be between the two, and the clearer the claim. It is not possible to predict that such a chain of events will again lead to the same result. But if we dispense with the doctrine of transferability, such a claim is unnecessary. For the purposes of assessing the impact of replication activities it is only necessary to show that the center probably caused the results at a specific time under specific circumstances. I know that such considerations are very academic, but they bear heavily on whether it is possible to establish the legitimacy of methodologies other than that of the classic control group. As for negative results, I think asking such small projects to look for these is asking too much. I would suggest that BEH hire someone to look specifically for negative outcomes across the whole Network, preferably in a goal-free evaluation.

Good luck with your mousetraps.

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6

FINDING MONEY FOR DEVELOPING REPLICABLE PRODUCTS

James W. Moss

As you are all aware, the primary purpose of the Early Education Act was not to provide support to a few centers and a handful of children but, rather, to facilitate the development of services for all handicapped children who need them prior to formal school entrance. To accomplish this purpose, the various preschool programs must somehow have a catalytic effect on the various communities and states--a difficult task at best and almost impossible if you are on the unemployment rolls and the children you have been working with are sitting at home watching television.

It is, therefore, reasonably important to maintain the operation of your centers, something which is infinitely easier to do if you have money. Most of us are old enough to remember money. It's that stuff you used to carry in your pocket for making minor purchases when there still were such things.

Getting money is never a problem. Teenagers extract it from their parents, and Girl Scouts trade cookies for it. People who have lots of it get more by contributing to paper drives and reducing their income taxes, and people who don't have any get it free from the state. Some people work for it. Getting enough money to operate a preschool program for handicapped children, however, is a very real problem, one which requires serious thought.

The manner in which the Federal Government administers the Early Education Program requires that, after three years, non-federal support be available to operate these centers. If such support is available, then the government may provide additional funds for an "outreach" program. This style of operation is designed to gain the broadest possible effect from the small amount of money available. It is designed to promote early education services rather than to support such services.

This is a reasonable approach to the problem, but it does make finance difficult for program operators. It means that program operators must begin planning for continuation funding almost as soon as they get their first grant.

I have attempted to analyze the funding problem and to put together a few suggestions which might be helpful.

TO CONTINUE OR NOT TO CONTINUE

The first step will be a decision about continuation. One may choose not to continue, one may choose to transfer the program to someone else to continue, or one may choose to continue. The choice not to continue is essentially a "non-choice." By and large, there is a commitment to children and staff which makes such a choice impractical. The "transfer" alternative, however, should receive consideration. Some organizations are in a more favorable position to obtain funds than others. In general, agencies whose normal activities include the operation of preschool programs for the handicapped are in a better position to attract funds for such programs than agencies which are not. Most universities, parent groups, and community service agencies will find funding more difficult than public schools, United Cerebral Palsy (UCP), Easter Seals, and so forth. The latter agencies, however, are not likely to put money into the support of competing programs. Although they are not likely to give money to operate your program, they might assume responsibility for continuing services to your children. They can do this in two ways: one, by absorbing your children into their own existing programs, and two, by taking over the operation of your center.

Both of these alternatives provide for the continuation of services to your children but may or may not allow for any form of outreach activity. It would be necessary to negotiate with the receiving agency to determine whether or not they would allow you to build an outreach program around their centers.

KEEPING THE PROGRAM GOING

The best outreach programs will be ones which involve continuing centers that have not changed administration. Finding money to keep your program going, therefore, is the best alternative of the three which are open to you.

The sources of funds are reasonably well known. They include (1) direct federal grants, (2) federal funds controlled by the states, (3) state tax monies, (4) local tax monies, (5) foundations, (6) service clubs, and (7) private donations, either direct or through community drives.

All money is good, but some money is better than other money. Federal grants are excellent for getting something (programs) started but are not so good for keeping things going. A continuing program requires continuing funds. Therefore, the best money is that which comes from local or state taxes and is specifically earmarked for the type of program you want to operate.

The second best source of funds is those federal monies distributed to states on a formula basis. The third best source is the community collection system, United Giver's Fund (UGF), Community Chest, etc. All other sources are generally stop-gap measures which postpone rather than solve the problem.

GENERAL PRINCIPLES ABOUT GETTING MONEY

There are some general principles which apply to getting money regardless of the source or the nature of the applicant.

(1) Time is your greatest enemy. The search for continuation funding should start no later than the beginning of the second year of operation. Such a timetable makes it possible to identify potential sources during the first half of the year and to sell the program during the second half. Formal applications should be ready early in the third year.

(2) A good salesman knows his product and the market. In order to sell your program to the community you need a lot of facts at your fingertips. Emotional appeals are still useful for some sources but not for as many as in days past. You need to know how many children need preschool services in the community and in the state. You need to know what such services cost and what the benefits are. You must be able to speak on the benefits of preschool programs for the type of children served in your programs. You may wish to point out the extensive cost accounting data which indicate the advantages of keeping retarded children in the community as productive members of society rather than institutionalizing them under public expense. It is easy to point out that the state can save as much as a quarter of a million dollars over the lifetime of a retarded child if he is properly educated and led into productive employment.

Money figures alone are not enough. You need to be able to speak to and demonstrate the specific benefits of your program for the children you serve.

(3) Know your funding sources. When you are asking someone for money, take the time to understand his interests, goals, and objectives. Whether you approach a private foundation, a service club, or an agency of the Federal Government, find out everything you can about the organization's history, its source of funds, the people who are involved in it, and its past performance with reference to projects like yours. Also, don't surprise anyone with your request: prepare them.

(4) Know your competition. Find out how many other programs, if any, in your area are seeking funds for the same purpose. Find out how many other programs within the same area are offering similar services but are not asking for money. Know your territory and where the money comes from to support other local programs. Whenever possible, avoid direct competition for funds; form coalitions.

(5) Avoid controversy. Avoid at all costs issues such as manual versus oral communication for the deaf or one style of preschool versus another. People responsible for supporting programs don't like to be caught in crossfire.

(6) Finally, get a money man. Most of us in the social services do not take money seriously. We are bad bargainers, we get taken by used car salesmen, we buy on impulse, and we always put services to handicapped children ahead of everything else. Some people are in the business of making money. They deal with it every day, they know all the percentage points, and they know other people in the same business. You need someone on your

boards who can take responsibility for money, particularly for getting it. One of the best examples of such a person will be a successful real estate salesman. He is usually involved in the community, politically aware, and not embarrassed by the need for money.

SOURCES OF FUNDS

Money for preschool programs may come directly from the Federal Government, from the Federal Government through state controls, from state money, or from local tax monies. Money is also available through local or national foundations, local service clubs, and community chest or UGF-type organizations.

Federal. Direct federal grants are useful for starting things up, but they are seldom useful for operating service programs for an indefinite period. Most federal grants run for three or four years, but the time can sometimes be stretched. Although BEH has made it clear that preschool funds are only for a three-year period and that additional funds are possible for outreach activities, I don't know of many instances where funds have been completely terminated at the end of the three-year period, except for projects which were of doubtful value. Generally speaking, if it appears that local funds may become available in a year or two, BEH may not terminate. It doesn't cost much to ask for BEH money, but unless you ask, you won't get it.

Extension of federal support is difficult to depend upon, however, since the BEH guidelines require outside funding after three years; and the timing of federal grants is such that your extension, if you get it, may be at the last minute, which may cause loss of staff. I wouldn't choose this approach unless all else fails and unless there are some prior assurances from BEH; on the other hand, I wouldn't discount the approach altogether.

Head Start, which still has money available, is a program with a restriction: 90% of participating children must qualify under low-income standards. Funds from this program are allocated on a project rather than on a per-child basis; but if enough of your children are poor, Head Start might be a source of funds. There is nothing in the rule book that says poor children can't also be handicapped. If your children don't qualify under the poverty guidelines this year, wait six months and check again. In another year or two everyone will qualify!

State Controlled Federal Funds. A lot of federal monies are managed by the states. In most cases, the guidelines of the states, rather than of the Federal Government, determine how the monies are used. The BEH State Grant Program can support preschool as well as school programs; it can be a source of funds for continuing your program. The BEH State Grant Program operates under a state plan, so it is important to know whether preschool programs are a part of that plan and, more important, to have some input into the plan to assure that funds are available for preschool programs. Again, states often like to use their federal monies for start-up activities rather than for continuing projects. Generally speaking, a state agency will look toward eventual community support for projects started with BEH funding. Continuing an existing project would not necessarily be a high priority for a state agency, but it could be a stop-gap measure if there appeared to be a gap between the end of direct federal grants and eventual community support.

The amended Social Security Act makes provisions for children who qualify for federal assistance. Day care services are appropriate support under this Act; but, again, a state is free to determine some of the services which will be provided under the Act. Generally speaking, if a handicapped child is receiving benefits under Social Security Insurance (SSI), that child is entitled to all other provisions of SSI, including day care services. These children are also eligible to receive early and periodic evaluations under the same Act. It is important for a preschool operator to understand how his state is responding to the new Social Security Amendments and to know which of his children are eligible for support. Social Security assistance is a low-income program. Eligibility is based upon several factors, including the number of adults and children in the family; consequently, eligibility must be determined on an individual basis.

The Developmental Disabilities Act (DDA) provides funds to the States on a formula basis. These funds are quite appropriate for the operation of preschool services for children who qualify as developmentally disabled. Qualifying children include the mentally retarded, epileptic, cerebral palsied, and other categories of children with similar characteristics. Developmental Disabilities funds are generally controlled by DD councils in each state. DD is also a State Plan program, so it is important to work with your local DD councils to ensure that preschool programs are included in the plan. It is also a good idea to get to know the members of the DD council. It is not a good idea, however, to get on the council yourself or have any member of your center on the council. This could set up a "conflict of interest" situation which could actually hurt your chances for money. This year, the DD councils will probably receive substantially more money than before, so that chances for you to get money will be significantly better than they were.

Revenue sharing is another source of funds which should not be overlooked. You must know the system in order to do very well here. If you don't know how revenue sharing is handled in your state, make friends with your local state representative. He should be a big help to you in many ways. As a matter of fact, you should keep in close contact with your state representative at all times, and make sure he knows you and your program.

State Funds. State funds can be an excellent source of money for the operation of preschool programs, depending on whether the state has made any provision for such programs. Some states provide funds independently of the public schools, while others provide funds to the public schools for such programs. Every state should make monies available for these programs.

State funds generally become available because somebody takes the time to promote legislation and to lobby it through the State House. Operators of preschool programs should take the leadership in promoting such legislation. State legislatures must be considered a funding source; all the recommendations about knowing your facts and getting to know the funding source apply here. State funds, whether administered from the State Capitol or through a local school district, appear to be the most stable funds for the operation of a continuing program.

It is important to recognize that most state legislative committees concerned with finance have priorities for dealing with appropriations. Generally speaking, the first priority goes to the continuation of existing state programs. The second priority goes to the expansion or extension of existing programs. The last priority goes to new programs. The state legislators I have talked with do not consider a program supported by federal funds under the first two priorities. Even though a program may have existed for three or four years under a federal grant, it still comes under the category of a new program in the eyes of most state appropriation committees. Therefore, it is very important to attract some state monies into your program as early as possible and to get the program established on the books of the appropriations people as an "existing program." This action moves the program out of the last priority (new program) and into the category of "continuing programs up for expansion or extension," thus improving your chances of attracting more state dollars.

If your state has no provision for the support of preschool programs, then you must help them. This is where your local state representative becomes important again. Get him to introduce a "preschool bill" with authorization for a small amount of money. Too much money will scare people away, and besides, it probably won't pass the first time anyway. But get the bill introduced to see what kind of support it generates. Then next year, organize that support and get the bill passed.

Local Funds. Local tax dollars have the same characteristics as state dollars but could be easier to attract, depending upon the nature of your organization. If you represent an agency which normally receives local tax dollars, such as a public school, then you want to do everything possible to get more of those dollars into your program. Local funds are also a possibility under some contractual relations, but if you are not already a tax-supported agency, this is not a likely source of funds. If you are an agency eligible to receive local tax dollars, get onto it from the very earliest opportunity. Don't wait until the last minute.

Foundations. National foundations are unlikely prospects for support and are usually not worth the time it takes to make inquiries. However, there are often local foundations with available funds. These foundations will generally be small, which makes grants possible only within a limited geographical area. Get a list of the foundations. If nowhere else, they will be listed with the state tax people.

Again, know your source, have information ready at your finger tips, and have something ready to demonstrate to the source. People in the foundation business often know other people in the same business. Try to get to know someone in a foundation and work for personal introductions. The personal approach to local foundations is far better than letters which ask for money.

Foundations generally like to keep their money available, so long term support is usually not possible unless you just happen to catch someone with a particular interest in preschool education for the handicapped. A foundation will more likely put money into something called research or demonstration than they will into the operation of a program; approach the issue of support with this in mind.

Community Service Clubs. Lions Clubs, Exchange Clubs, and the like often take on projects or programs for support or partial support. Generally there is not a lot of money in such organizations, but this area of support is worth investigation. More often than not, there is a greater demand for the funds of such organizations than there is money. A real selling job can sometimes pay off with these groups. It is usually easier to get one-shot help than it is to get continuing support. Use your money man for these contacts.

Community Charities. The Community Chest, United Giver's Fund, and the like are excellent sources of funds, since their money is generally for the support of continuing services. As I understand it, there is often much red-tape involved with these groups and a lot of competition for their funds, so a good sales pitch started very early is necessary. This is another job for your professional money man. Start early and be prepared for a lot of work and an uphill climb.

RECOMMENDATIONS FOR DIFFERENT TYPES OF ORGANIZATIONS

Different types of organizations or agencies have different problems when it comes to getting money. Some get it more easily than others. Information on funding is particularly important when you get into replication activities. You will want to look for replication organizations which have the highest probability for continued funding from a source of funds which is least likely to be in direct competition with you for the same funds.

State Supported Agencies. State supported agencies which are appropriately responsible for preschool education and which normally receive support from tax dollars should move as quickly as possible to bring their programs under tax support. Such agencies are least likely to continue to receive federal grant support. An early concerted effort to get even a small amount of tax money into the program in order to have the program established as a continuing state obligation, will pay good dividends in the long run. If it is not possible for you to work directly with state legislators or budget people, get your parent groups on the ball.

Except for federal grants, state support agencies have difficulty attracting outside funding. Service clubs will sometimes help on a one-shot basis but not much more.

Universities. Universities have unusual difficulties in continuing a service program. Many people do not believe universities should be in the business of providing services, so there is little sympathy for the university which attempts such service programs. Also, many taxpayers are not sympathetic to universities. It is difficult to get public support. It is also difficult to get support from civic agencies. It is almost impossible to get non-university tax support, and university budgets are generally impossibly tight.

If they would normally be responsible for providing preschool education, schools will often pay tuition. Parents will sometimes offset some of the costs through tuition, but don't count on tuition alone to pay expenses. Generally speaking, universities are best at attracting federal funds and should work at that as long as possible.

If off-campus, develop an affiliation with a non-university agency which has more community sympathy. A local National Association for Retarded Children (NARC) group, for example, will have more luck with the local Exchange Club or Civitan group than the university will. But it has to be a real partnership and not just a front group.

If on-campus, make the rounds of local and state foundations. Foundations and/or another federal grant are about the only answers to the on-campus funding problem.

Best bet for universities: give the program away to a more appropriate agency once the federal pump runs dry. Organizations such as United Cerebral Palsy (UCP), NARC, Easter Seals, etc., are more likely to support a program that they manage than they are to give money to a university. Try for state support, but don't be optimistic.

Community Agencies Concerned with the Handicapped. Groups such as UCP, Association for Retarded Citizens (ARC), Easter Seals, etc., should focus on state controlled federal monies. DDA is the best bet for state controlled federal funds today, since there will probably be an increase in that budget. Get to know the local DD council: give yourself plenty of time.

GRANTSMANSHIP

No matter what anybody tells you, don't discount the value of a well written proposal. A good proposal will have several important characteristics. The first is clarity. Make sure that you say what you want to say and that there is no accidental ambiguity; on the other hand, you may sometimes be intentionally ambiguous to great advantage. After your proposal is written, have other people read it and tell you what they think you are saying. Avoid the temptation to correct their misinterpretations as they read. Their misinterpretations will be the Office of Education's (OE) facts, and you won't be there to correct OE.

The second important characteristic is specificity. Be precise about what you will be doing and what you expect to achieve. Clear, precise statements are very impressive and very important. As with clarity, there is a time when you don't want to be too precise, but don't let imprecision happen by accident. A little deliberate fuzziness among a series of precise statements will not be noticed or attended to.

The third characteristic is in the area of evaluation. The people who read your proposals have a high regard for evaluation, and they will be disappointed if they don't find some provisions made for evaluation. Put in an evaluation plan, but design the plan in a way that does not inflate your program's cost. The same people who like evaluation are the ones who want to see most of the money go for other purposes. Remember that evaluation is not a research project. All you have to do is obtain evidence that you are achieving the results you promised. Specify your results in a way that allows the task of evaluation to be simple.

Fourth, include data in your proposal. It usually doesn't matter what kind of data, but generally the more relevant the data the better the data. So, report numbers of children, types of children, demographic data from the community or state, qualifications of teachers, numbers of children reared by each teacher, and previous jobs held by the local superintendent of schools. Data is always impressive. It gives reviewers the impression that you are a systematic thinker, that you make data-based decisions, and that you will be able to handle your evaluations better.

Keep in mind that decisions are more and more made without site visits, which means that everything depends upon what you write and how you write it. Keep in mind that you don't have to lie to be misleading. Reviewers read into proposals what they want to find so a statement that can be interpreted several ways will generally be interpreted in a way which is generally consistent with the official guidelines. For example, it is possible to say that "no federal funds are needed in order for the children currently served to continue going to school." That doesn't necessarily mean that you don't need federal money to continue serving those children. It could mean only that money is not needed for transportation. This is a case where lack of clarity can work to your benefit.

Also, don't worry about giving people impressions that might work in your favor. If you must have a commitment of continued funding for keeping your doors open and helping in outreach and if you are working on getting money, keep in mind that your proposal must go in a long time before you get the committed money and that sometimes there is a last minute slip which can't be avoided. So if you think you have the commitment, go ahead and say that "according to the best information available to me, the money will be available."

If you absolutely can't get money to continue your project, keep in mind that you are still eligible to apply for an entirely new three-year grant as long as it is for a clearly different activity. If you are now dealing with trainable retarded children, you could not get a grant to serve another group of trainable retardates. So trade populations with another school.

Don't depend upon a site visit prior to funding (the Office of Education does not have enough staff or travel money); write your proposal to get money (be practical), and accept the fact that some differences between what you write in the proposal and what actually happens in practice are expected.

Finally, get yourself a proposal writer if you don't have those skills. Find someone at a local university. Try to get them on your board of directors, if possible, in order to get some free help. If that's not possible, then pay a consultant fee. University proposal writers are generally more attracted by some continuing relationship than by a one-shot fee, so you might have to write them into the proposal in some way. If there is a once-a-month consultant fee built into the budget, the person will work harder to write the proposal for you than if there is no continuing involvement. Whatever it takes, it is important to get help if you are not a skilled proposal writer. Make sure that the person you select to deal with has actually received grants and not just applied for them.

CONCLUDING STATEMENTS

Getting and keeping money is serious business and should not be taken lightly. You need to pinpoint your sources, learn all you can about them, and go after them as if your program depended upon it. It is not a job for amateurs, so get professional help. Don't assume that just because you got a grant the first time that you are good at getting money. There are a lot of reasons behind that first grant; some of which have to do with the number and quality of competing applications from your part of the country. It is not impossible that you got your first grant because it would have been embarassing to the agency not to have something in your state in your area of the handicapped, and your application was the best of a bad lot.

About politics: politics very rarely play a role in who gets federal grants. If you generate congressional pressure, you make more work and worry for the agency and often create bad feelings; all of which doesn't help get money. If a grant is given for political reasons, it is for reasons far too complex to go into here. A grant doesn't come in response to political pressure.

On the other hand, it doesn't hurt to let the agency know how broadly your project is supported back home or how well you are thought of in your local community. A letter from a legislator which says how great you are and how important your program could be to the state or district does not hurt anything. An enthusiastic letter of support from knowledgeable people or legislators is useful as long as no threat or pressure is implied.

Finally, be prepared to work hard, plan your campaign carefully, approach the money raising task seriously, and get the best help you can.

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7

ORGANIZING YOUR STAFF FOR REPLICATION

Lynn Gunn

While staffing patterns of the various BEH projects vary, most projects include (at least in the first years) a director or coordinator, teachers, teachers' aides, parent workers, social workers, community workers, and the part-time assistance of various people such as psychologists, occupational therapists, physical therapists, and other professionals. The skills that go along with these roles are designed to fit the needs of model program operation.

The director or coordinator of a model program is responsible, not only for planning and designing the unique processes and activities necessary in preschool education for the handicapped, but also for the implementation and the day-to-day operation of the preschool program. The skills of a director or coordinator often include teaching, planning, coordinating, directing personnel, budgeting, and decision-making. Successful outreach and replication activities demand other skills not necessarily aligned with the skills involved in program operation.

Once the program is satisfactorily serving a specific population, the process of replication can begin. To be successful, the replication model must hold together well; you (the director) and other spokespersons must know it intimately, and be able to explain it, defend it, and respond to questions about it before you begin your replication activities.

FROM MODEL PROGRAM TO REPLICATION

I look at replication as a series of organizational activities rather than as one sudden change of activity. The first phase of activity involves developing a tight model program; the second phase involves outreach and demonstration; the third phase involves product development; and the fourth phase involves selling and implantation. Various skills and abilities are necessary throughout the process. They include: *communication skills*, to help in describing the program; *listening and responding skills*, to help in answering questions about the program; *sensitivity skills*, to help in perceiving problems that outsiders may have; *selling skills*, to help in convincing the target audience that you have something they want and need; *negotiation skills*, to help in clearly defining and nurturing a relationship with your replication site; and *product development skills*, to help in identifying, designing, and creating the replicable product.

Let us assume for a minute that you and your project staff have decided (and are ready) to go full force into the replication process. You can't stop what you are doing. You can't terminate the program you have developed. Part of the definition of a model program is that it continue throughout time, that it be available for demonstration. You must make some staff changes. Although you may eventually have to recruit new staff members, first consider redefining current staff roles and using volunteer assistance, advisory board involvement, consultation, and purchase of services to handle the added demand of replication activities.

Before doing anything else, assess your own and your staff's skills. As a director, you may find that your skills are more in tune with running, than with selling, the program; or that you feel most comfortable talking to other community leaders to gain support for your program and others like it; or that you prefer to work as a trainer or technical assistance agent. Whatever your skills, assess them clearly so that you can best serve the project and the goals of that project.

Someone completely knowledgeable about and supportive of your program needs to be able to relate well to people outside of your organization. It may be you yourself, another staff member, a volunteer, an advisory board member, or a contractee. If you begin to spend more and more time relating to external persons and less time on the project site, you may want to promote one of your existing staff members to the position of "on-site coordinator" (i.e., a person who will be responsible for day-to-day decisions). On the other hand, if you feel comfortable with the day-to-day matters involved in being with the children, teachers, and parents, you may want to give more of the community relations responsibilities to another staff member, someone who has the appropriate outreach skills. Or you may find a volunteer parent or a board member who has these skills and is willing to begin the outreach-demonstration activities.

The demonstration and outreach phase (phase two) is one of initiation; it is the beginning of the replication activities that you will be pursuing for the next couple of years. It doesn't really matter who plays the outreach role; what matters is that the person or agency playing the role is completely knowledgeable about the project and can play the role well.

The product development (or third) phase of replication activities may involve further staff changes. If your product requires the development of specific materials, such as a curriculum package, obviously you will need someone skilled in the development of that kind of product. You will also need someone to sell the product; and if your product is a training package which, for example, includes an assessment device, you will need someone to train people in the use of the product. It does not really matter who fills the necessary roles, as long as they are filled effectively by people who have the skills and the appropriate amount of time to do the job. While all this is in operation, of course, someone needs to manage and maintain the model program.

The entire process of replication requires sophisticated planning to ensure that the content of the replication product is clear and that staff members are not spread too thinly. Obviously, a person teaching a class of 4 year olds does not have time to train Head Start teachers. To help identify potential problems and needs, it is necessary to analyze your situation: who is going to do what, for what amount of time, beginning when, and starting where?

If the analysis reveals some needs, you may want to include a staff position dedicated to replication activities in your third year proposal. Whether or not you term the position "outreach worker," "replication coordinator," or something else, is dependent on how you want to design the replication system. If you are going to do most of the work yourself, it might be appropriate to develop a "project manager" position for someone who can stay on-site 100% of the time and cover the administrative responsibilities while you are in the field. If you are fortunate enough to have already identified the source of your continuation funding, you may be able to get the source to carry the salary of one or more of your teachers next year, thus freeing salary money that could be used to hire a replication worker.

A large amount of time will be involved in arranging and negotiating third-year continuation support for the model program. Once continuation funding is assured, the more thorough and specific third and fourth phase replication activities can begin. What specifically needs to be done will be determined (1) by the nature of your product, (2) by the nature and size of your target audience, (3) by your delivery strategy, and (4) by the general purpose and goals of your replication activities. After the third year you will have to include persons who can not only maintain the project under continuation monies but also maintain the replication effort.

In summary, the process of replication includes various phases of activity in which the model program is built, maintained, and expanded; each phase demands differently skilled people. The necessary skills may be found in you yourself, in your staff, in your advisory board, in outside agents, or in volunteers. To facilitate replication, you need to know early in the planning stage of your replication activity from whence the skills will come.

RELATIONS WITH THE REPLICATION SITE

In looking forward to replication, some other considerations, not totally unrelated to staffing, must be made. These considerations concern the relationship you and your project will maintain with the staff of the replication site. I'd like to bring in an analogy using the pieces of an orchestra to represent the replication site(s); a musical score to represent your product; and the conductor to represent you and the model program. How beautiful the music to be played will be depends upon the orchestra, the score, and the conductor. The nature, frequency, and intensity of the relationship between your project and the replication site are going to be determined to some extent by the purpose, the goals, and the nature of your product; by the nature of the site(s) and the characteristics of the people working at those site(s); and by you, the conductor.

Some replication activities may involve short-term relationships: for example, training Head Start teachers to use an assessment device. Other replication activities may involve longer, more intense relationships: for example, setting up similar programs in several local schools. Still other activities may involve primarily salesman/customer relationships: such as introducing a new curriculum into existing programs. Because of possible variations from program to program, it is difficult to advise you on what the nature of your relationship with your replication site(s) should be.

In order to define the relationship, you need to start out with a fairly clear idea of what you hope to accomplish with your replication activities. Are you providing materials or developing skills? What are your goals? What is the nature of your product? What do you consider to be the ideal relationship? With how many sites will you be working? How many contacts will you have with each site? Will there be a set number of contacts or a series of contacts? Will the contacts be daily, weekly, or monthly? Will you be a teacher, director, consultant, or coworker? For how long will the relationship be maintained? When will you know that the relationship is over?

Each of these questions needs to be asked early in the planning stage. The answers to the questions will not only help you define your expectations, but they will also help you identify the needs that you must consider in order to meet your goals and objectives. I hypothesize that answers to these questions, if they come early in your planning, will help you to do a more successful job of replicating. A thorough and thoughtful conductor, with a good orchestra and a good score, can make beautiful music. Relating to persons in another organization, whether it be a new one or one previously set in its ways, can be facilitated by a clearly defined set of expectations. Remember, replication is an interaction process which includes not only you but other people at the replication site. It is important to advise your site of what they can expect from you in terms of contact and relationship. A good product or a good model is the result of a strong relationship.

The staff at the replication site might repond to you in several ways. Some sites will think of you and your project staff as deities: all knowing, all understanding, and always right. Others may look at you as intruders, people coming in to raise Cain. Others may fluctuate between the two views. As early as your first contact with potential replication sites, try to assess the position of local personnel toward your organization. Although you don't have sole control over the relationship or how it developes, foresight and consideration will help the relationship develop in a healthy and productive way.

It is important to realize that the relationship with staff at the replication site will not be maintained forever. Withdrawal or breaking off the relationship will come at some point. The symphony will have its finale. The disengagement will be more comfortable for everyone if it comes by design rather than by default. Consider the termination of the relationship in your planning. When will you know that you are through? How will you disengage yourself from your audience?

Ideally, withdrawal will come at a point when your part in the project is completed and you are satisfied. But what if the relationship is not successful and replication does not take place? Some musicians inevitably hit the wrong note or find themselves off key. What kind of cues can you identify in your planning (i.e. before you begin a relationship) that will indicate when the relationship should be terminated? Consider these cues as you plan so that you will not be caught by surprise. If you can design a process of disengagement which will work whether or not you are successful, your project reputation will benefit; and you will be ready to take a bow!

In summary, the nature of the relationship which you and your project maintain with the replication site depends upon the characteristics of your product, thorough planning, and the availability of appropriate skills within your project. Ideally, the relationship between your project and the replication site, during the process of replication, will follow a positive and productive pattern. Foresight, planning, and serious consideration of your skills, products, and future expectations can help to make the ideal become the real.

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Her major professional interests are services for children and mental health and mental retardation programming for all age groups. She is currently analyzing the characteristics of juvenile offenders in order to determine the kind and amounts of mental health services that they need.

Ms. Gunn has published articles in Social Education and the Archives of Internal Medicine. She also has contributed to an anthology, Secondary Schools Today.

Ms. Gunn holds an undergraduate degree in education and a graduate degree in sociology, both from the University of North Carolina at Chapel Hill.

8

A CASE STUDY IN REPLICATION

Mary M. Wood

PART I: IN THE BEGINNING

A demonstration project can do no better than to follow carefully Dr. Stedman's suggestions for replication. His final paragraph leaves the reader with a charge to incorporate replication activities into the project design at an early stage. This is important advice. While it is impossible to predict exactly how replication will occur at the end of the third year of demonstration, it is important that numerous alternative options be carefully woven into the fabric of the demonstration from its inception. Then, with equal care a variety of people and agencies, both public and private, must be influenced to actively seek and implement some of the demonstrated options. Perhaps the Rutland Center experience will be helpful to you in mobilizing the replication efforts of your demonstration project.

From the beginning, the Rutland project had replication as a major priority. Critics always commented: "What you are doing is great, but will it work anywhere else? Can others do it with as much success?" State legislators asked us, "Does it work? What does it cost? Will it get the job done in other parts of the state?"

In the opinion of the Rutland staff, a demonstration effort meant answering these questions by producing a model which could be used effectively by others in a variety of locations. This commitment influenced every aspect of activity, planning, implementation, record keeping, and evaluation. It even influenced the selection of staff members. Each person had to be committed to the concept of building models which would, ultimately, result in an exportable product (Wood, 1975).

The Rutland Center project was originally designed as a community based program of psychoeducational services to children with severe emotional disturbances. It was to serve children (from birth to fourteen) in a five-county area in Georgia. The preschool component was funded by BEH as a First Chance project; and the school age component was funded as a pilot project by the Georgia Department of Education. Both projects began simultaneously and were viewed as a continuum of service. The original proposals included an objective to establish two satellite centers in other areas of the state. The idea was to provide sites for pilot-testing the replicable procedures (Wood, 1971; TADS, 1972).

The need for services was incredible. A single fact sheet was prepared to underscore the problem (figures 1 and 2). This sheet was circulated to citizens, statewide, who were involved in the Mental Health Association. It was also circulated to key state legislators. Perhaps most important, this sheet was part of a report prepared by the project staff and submitted to a special group which had been appointed by Governor Jimmy Carter and was called "The Governor's Commission to Improve Services for (cont. p. 137)

Figure 1

Fact Sheet Prepared to Stimulate the Interest of Legislators and Citizens in the Critical Need for Services

DID YOU KNOW THAT:

- 30,300 Georgia Children (ages 0-17) need help with their serious emotional and behavioral problems.

- only 10% of Georgia children (0-17) needing special help are receiving professional help with their serious emotional and behavioral problems.

- only 124 preschool age (0-7) children having serious emotional and behavioral problems were served in 1970 and this represents 2.0% of those needing services.

- 95,584 children were born in 1970 in Georgia; 2,150 (2.25%) will have serious emotional and behavioral problems by the time they enter school.

- of the eight major residential institutions sponsored by the State of Georgia for mentally retarded and emotionally disturbed children and/or adults, only four offer services specifically for children with problems of behavior disorders or emotional disturbance.

- only 8 of 63 psychiatric outpatient clinics in the State of Georgia serve primarily child populations.

- 75% of children receiving services from outpatient psychiatric clinics are receiving such services from predominantly adult-oriented clinics.

- 25% of the children receiving treatment from outpatient psychiatric clinics received such treatment from predominantly child-oriented clinics.

- Central State Hospital has 1 1/2 times as many mentally retarded children in residence as it has behaviorally disordered and emotionally disturbed.

- of the 291 emotionally disturbed and behaviorally disordered children (0-17) at Central State Hospital, only 62 (21%) participate in a Special Education Program both because of a lack of teachers, and a lack of funds.

- only 41% of the emotionally disturbed children (0-17) at Central State Hospital are housed in "child-only" wards.

- the eight residential institutions sponsored by the State of Georgia treat 9 times as many mentally retarded as emotionally disturbed children.

- it costs from $3,100 - $13,100 per year to care for an emotionally disturbed child at one of the state sponsored residential centers, and this cost does not guarantee that the child will participate in special education programs (only 5 disturbed children served at $13,000 per year).
- it costs between $12,000 and $14,000 annually per child for private, non-profit residential treatment programs nationally.

(from Wood, Quirk, and Swan, 1971, p. 4)

WHERE DOES A DISTURBED CHILD RECEIVE COMPREHENSIVE AND COORDINATED SERVICE?

Many services for emotionally and behaviorally troubled children are available in local communities and at the state level. Also, many agencies often identify a child needing treatment but have no recourse for aiding the child and his family in procuring services. A center located in the child's community could coordinate efforts of these various organizations and agencies concerned with mental health for children (see Figure 2). The disturbed child may come to the attention of any of the agencies or programs shown in the diagram. While each service has a contribution to the mental health of children, there is no agency with a primary treatment responsibility for children in the community, at present. IF COMMUNITY PSYCHOEDUCATIONAL CENTERS CAN BE ESTABLISHED TO REPLACE THE QUESTION IN THE CENTER OF FIGURE 2, COORDINATED MENTAL HEALTH SERVICES FOR CHILDREN CAN BE ACHIEVED.

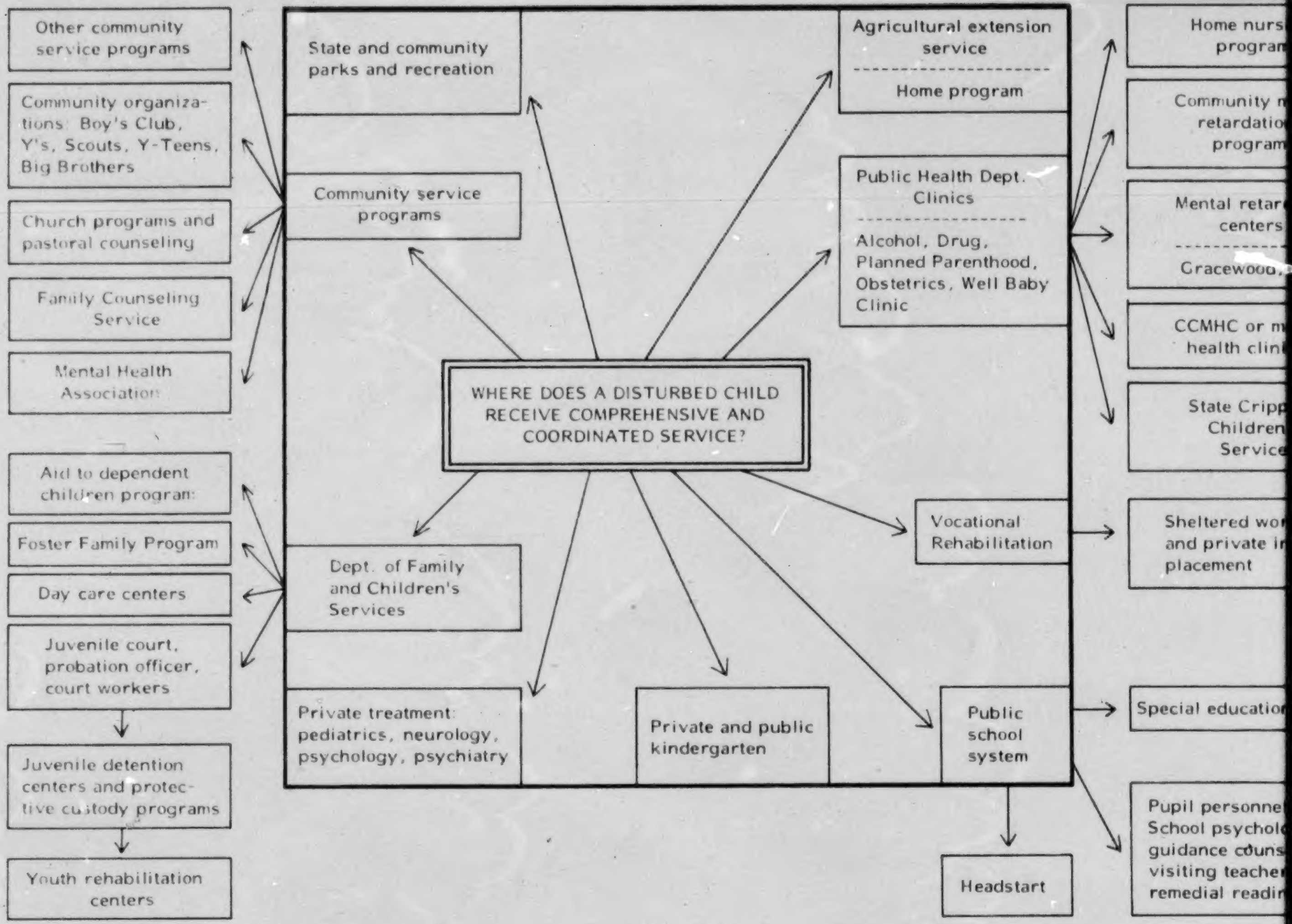
WHERE DOES A DISTURBED CHILD RECEIVE COMPREHENSIVE AND COORDINATED SERVICE?
State and community parks and recreation
Community service programs
Agricultural extension service
Home program
Public Health Dept. Clinics
Alcohol, Drug, Planned Parenthood, Obstetrics, Well Baby Clinic
Vocational Rehabilitation
Dept. of Family and Children's Services
Private treatment: pediatrics, neurology, psychology, psychiatry
Private and public kindergarten
Public school system
Other community service programs
Community organizations: Boy's Club, Y's, Scouts, Y-Teens, Big Brothers
Church programs and pastoral counseling
Family Counseling Service
Mental Health Association
Aid to dependent children program
Foster Family Program
Day care centers
Juvenile court, probation officer, court workers
Juvenile detention centers and protective custody programs
Youth rehabilitation centers
Home nurs
program
Community m
retardatio
program
Mental retar
centers
Gracewood,
CCMHC or m
health clin
State Cripp
Children
Service
Sheltered wo
and private i
placement
Special educatio
Pupil personne
School psychol
guidance couns
visiting teacher
remedial readi
Headstart

Figure 2

SERVICES FOR DISTURBED CHILDREN

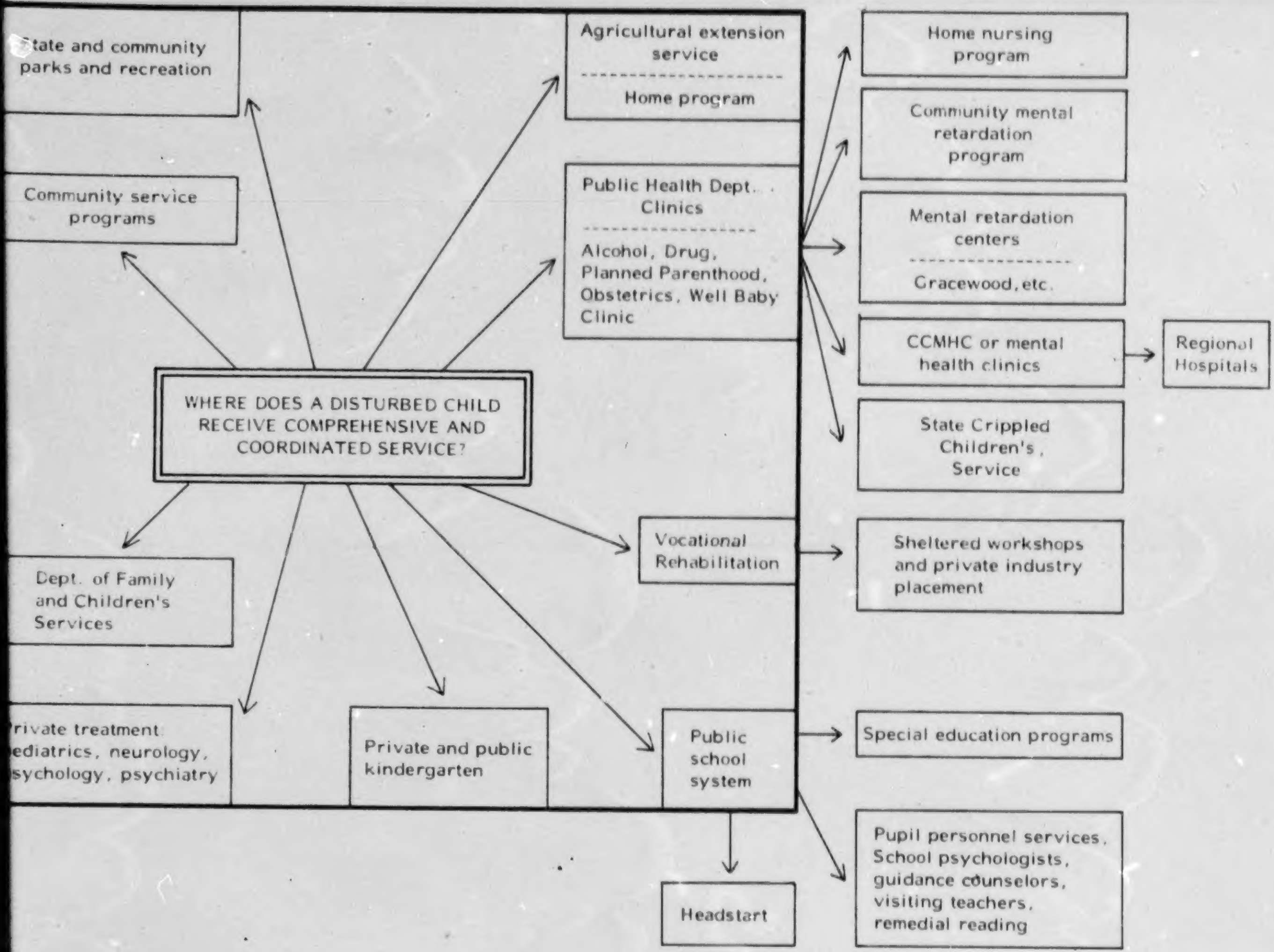
WHERE DOES A DISTURBED CHILD RECEIVE COMPREHENSIVE AND COORDINATED SERVICE?
State and community parks and recreation
Community service programs
Agricultural extension service
Home program
Public Health Dept. Clinics
Alcohol, Drug, Planned Parenthood, Obstetrics, Well Baby Clinic
Home nursing program
Community mental retardation program
Mental retardation centers
Gracewood, etc.
CCMHC or mental health clinics
Regional Hospitals
State Crippled Children's, Service
Vocational Rehabilitation
Sheltered workshops and private industry placement
Dept. of Family and Children's Services
rivate treatment
ediatrics, neurology,
sychology, psychiatry
Private and public kindergarten
Public school system
Special education programs
Headstart
Pupil personnel services, School psychologists, guidance counselors, visiting teachers, remedial reading

Figure 2

SERVICES FOR DISTURBED CHILDREN

Mentally and Emotionally Handicapped Georgians" (chaired by John L. Moore, Jr.). This report represented the beginning of replication for us. Through it we sought to identify potential groups and individuals who could become instrumental in supporting the widespread use of our demonstration model. The sheet evoked much response, and it helped us to answer these questions:

- Who will respond to the need?
- Who else is seeking solutions?
- How does our demonstration project fit into the existing framework of resources and constraints in the state?
- Can we develop a set of strategies which are general enough to be supported by a number of agencies and groups in all parts of the state, yet specific enough to facilitate the growth of the Rutland model to its fullest potential?

By spending many, many hours talking both to groups and individuals throughout the state,-the answers to these questions were forthcoming. From such information, thirteen guidelines emerged as the basis for a "platform" around which concerned agencies, groups, and individuals could rally. These guidelines also served as the basis for developing the Rutland model into what eventually became the Georgia Psychoeducational Center Network.*

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* When completed in 1976, the Georgia Psychoeducational Center Network will serve the entire state with 24 major centers and numerous rural outposts; it will serve more than 6,000 seriously disturbed children and their families per year.

1. The program should clearly distinguish mental health services for children from services for adults.
2. The program should reduce the need for hospital and residential care for young children by keeping children with their families while receiving services.
3. The program should serve children from birth to age 14.
4. The program should keep families actively involved in supportive ways.
5. The program should keep these children, whenever possible, enrolled in regular school or preschool programs while receiving these special services.
6. The program should serve children whose problems are severe and for whom no program or service is available.
7. The program should have the qualities of both educational and mental health programs.
8. The program should draw together available professional manpower from mental health and special education.
9. The program should utilize paraprofessionals, volunteers, parents, and other community resources in the rehabilitative process.
10. The program should build upon existing agencies.
11. The program should permit counties to share services.
12. The program should be applicable to all of the rural and urban areas of the state.
13. The program should include a system for ongoing evaluation of treatment effectiveness. (Wood, Swan, and Quirk, 1971)

The entire state had become the major replication target. Conditions were such that state legislators would not permit any one area of the state to benefit for a sustained period without some plan for comparable services to the entire state. So, back in 1970 it was a "go for broke" situation (Davis, Elliott, Devoid, 1972). To survive at all, the Rutland project had to produce something that would be of benefit to all Georgia children needing such services. The alternative was that the project would be discarded after federal funding ceased.

PART II: OUR TARGETS

Dr. Stedman defines targets as "any individual, group, or organization of consequence which, when mobilized, can assist the demonstration center in replication activities" and suggests identifying specific users, conveyers, supporters, and competitors. The entire Rutland project staff was briefed on the importance of disseminating the project information to all of these groups at state and local levels. Contracts with both public and private individuals were stressed.

Because the outer parameter for our replication effort had been defined as a statewide network, our first task was to identify a user target which could operate throughout the state. We hoped to find one which had a public responsibility to serve seriously disturbed children. In fact, we came up with two such target agencies--the Community Mental Health Program, administered by the State Mental Health Division; and the Department of Special Education, administered by the State Department of Education. The latter had received a legislative mandate, in the form of Georgia House Bill 453, to serve all handicapped children by 1976. The former had a large amount of popular support and legislative backing. Community mental health was a highly visible issue, with the Governor and key legislators providing leadership. In progress at that time was what amounted to a crusade to deinstitutionalize the state's mental hospitals; but viable service alternatives had not yet emerged.

Our *conveyer* targets were defined for us--the Georgia General Assembly, the State Board of Education, and the State Board of Health. If we were to be successful, the first conveyer target had to provide the commitment through funding, and the other two had to endorse the design through Board actions. The University of Georgia and the Board of Education for the Clarke County School District also played significant conveyer roles because they were the recipients of the demonstration fundings; they had to respond with great flexibility as the scope of demonstration and replication increased.

Obtaining the desired commitment from these conveyer organizations was eventually accomplished. Much credit must be given to our *supporter* groups who had emerged early in our effort to disseminate information about the dire need for services. There were influential supporters in almost every area of Georgia. In many instances individual community leaders were key forces. We also found that several statewide organizations already had established local groups. Of major help was the Mental Health Association of Georgia. Another group at the state level was the newly formed Georgia Interagency Council for Exceptional Children, representing interest groups for every type of exceptional child. Both of these organizations responded to our proposal for a statewide network of psychoeducational centers by including a recommendation for such a network in their platforms. Had the state Developmental Disabilities Council been formed at that time, it too would have been a major conveyer resource.

Other groups which responded supportively to the proposed replication idea were the Area Planning and Development Commissions, various Model Cities programs, 4-C programs, Appalachian Development Commission programs, the Interfraternity Council at the University of Georgia, numerous women's clubs and church groups, the League of Women Voters, and the American Association of University Women. Business organizations, men's civic clubs, bank directors, the hospital boards, and ministerial associations also were responsive. All over the state these groups were approached, informed, and asked to help by contacting their own state legislators, boards of education, school superintendents, and mental health professionals.

Perhaps the most persuasive and influential of all our supporters were the parents of seriously disturbed children. They were articulate spokespersons, meeting with our staff and influential leaders among the conveyer organizations many, many times. These parents conveyed the need more eloquently than any professional could. They also testified to the success of our model from their own experiences. Finally, they pleaded the cause for thousands of similar children and families for whom no service was available.

Finally, a word is needed about competitors. Our statewide conditions were so inadequate that there were few viable competitors for model implementation tax dollars. Pet projects of a few mental health professionals often failed to develop beyond the support of local legislators because the projects were limited in impact and scope for the state at large. Other proposed projects failed to materialize because they were too massive in scope, requiring endless tax dollars to combat an endless problem. Other projects failed because they had not done their homework. They had decided to approach legislators for support but had not prepared their proposal in terms which coalesced with those that appeal to legislators--brevity, accuracy, dollar costs for units of output, succinct projections for meeting specific needs, and finally something of benefit to the people back home.

PART III: STRATEGIES

A recount of the Rutland strategies which were used to influence the various groups identified in the previous section can best be summarized as three efforts: working with the leadership in each of the target groups; developing a systematic plan for replication; and preparing material for impact on each group.

Working with the leadership

Havelock (this Tadscript) discussed strategies for influencing groups by suggesting that key innovators, resisters, and leaders be identified in each target group. To identify these key persons, we had numerous contacts with a variety of people in each of the target groups. Such contacts, both formal and informal, professional and social, helped us to understand the purposes, priorities, and power within the groups. We learned that each group had a specific language of its own and its own set of problems, restrictions, and frustrations. Each group responded to the opinions of a few highly esteemed individuals. Often these individuals were not in official positions. Sometimes they were not even members of the particular group. It was important to know who the official members of the group's leadership were, to whom they answered (officially and unofficially), and what their status was with their superiors, peers, and those in lesser capacities.

Through an inordinate number of such contacts, the dynamic power structure and character of each of our target groups became clearer and those individuals serving as innovators, resisters, and leaders emerged. To Havelock's three categories we added a fourth--the implementer. Within each group there was always a person who was willing to work for what he believed to be an important cause. Such persons would help us prepare material, contact people, talk about the project, plan the details of meetings, introduce us to key people, keep us informed of group activity, identify potential allies, and put the proper information in the right hands at the propitious moment. We learned that resisters could become leaders when they were convinced of the efficacy of a proposal. In fact, such individuals often became our most effective influencers because they were known to resist change unless it was highly appropriate. Similarly, innovators had to be approached with caution. An individual known to be overly "innovative" often had incurred considerable resistence or even suspicion from more conservative, cautious leaders.

Among the highly regarded innovators that we were fortunate to have was Governor Jimmy Carter. He was a key to the support group. We were fortunate to have among the conveyer groups some members of the state Board of Education, the state directors of Special Education and Mental Health, Mr. Herb Nash and Dr. Addison Duval, and some members of their staffs. These were individuals who saw the potential in this new plan and put their support behind its implementation.

In the user groups, we found local special education coordinators, teachers, and community mental health professionals who were responsive to our new model. Without the willingness of Mr. Sidney Boswell, Superintendent of Glynn County Schools (Brunswick, Georgia), and Dr. Charles McDaniel, Superintendent of Clarke County Schools, to permit the demonstration of the model and its first replication, the Network would never have developed.

Among the leaders in the conveyer organizations, several members of the Georgia General Assembly made significant contributions to the implementation of statewide replication. In particular, State Senator Paul Broun introduced the model to the legislature. Also, the chairmen of the House and Senate subcommittees for Special Education, Mental Health, and Appropriations were instrumental in the success of the network plan.

Developing a Systematic Plan

The plan for mobilizing others in support of the proposed network took a different emphasis each year. However, there was a single plan for replication behind these efforts. This plan was a design for phasing-in new psychoeducational centers over a seven-year period, in each of the 16 mental health regions of the state. As it actually happened the state was redivided into 24 regions and the Network was completed in five years. Each year different regions of the state required our attention.

The development of this plan required considerable in-house education of our staff on the subject of local conditions. Initial planning was based on distributions of the child population obtained from the 1970 U.S. Census. The child population for each region was recorded in three age groups: 0-6, 7-14, and 15-21. An annual prevalence of 1/2% was determined to be a conservative, but appropriate, estimate of children needing community-based treatment for severe emotional disturbance. With these figures, the target number needing service in every region of the state was estimated. From this, the size of staff needed to provide services was established. The site of each proposed center was tentatively identified as the largest, and most centrally located urban area in each region, with rural outposts reaching into each county in the region with a child population above 5000. From this information, basic costs were projected for each region and for the entire state network. Figure 3 summarizes these original projections.

With an overall strategy for the Network and with sites identified, a systematic plan for disseminating the replicable components of the model was needed. Outside consultants were asked to review each component to determine how suitable it was for replication and dissemination. These same consultants were used for the life of the project. They provided continuity and insights which had high dividends.

One important decision was made early in planning. Certain minimum aspects of the model would be required of any new center, but considerable local choice in selection of the curriculum, treatment methods, type of infant services, and services to parent's components would be encouraged. In this way, each new site could develop a program which was responsive to its particular local conditions. Perhaps this decision was the most important that we made. The second most important decision was to require each center to use

Figure 3

Original Network Projections

PROPOSED COSTS FOR A NETWORK OF PSYCHOEDUCATIONAL CENTERS FOR STATEWIDE SERVICES TO EMOTIONALLY AND BEHAVIORALLY DISTURBED CHILDREN

supported jointly by Mental Health
and Special Education

STATE AGENCY:	PUBLIC HEALTH	EDUCATION
Agency Division:	Division of Mental Health	Division of Special Education and Pupil Personnel Services
1970-1971	Community Mental Health Comprehensive Community Mental Health Centers 2 operating 33 planning Note: At present no system is set up nor mental health funds allocated to provide services to children at these centers in conjunction with Special Education programs.	Seriously Emotionally Disturbed (SED) Centers (3) Rutland Center, Athens South DeKalb Children's Center Savannah program (Cost $500,000.00)
1971-1972	Comprehensive Community Mental Health Center APPROXIMATELY 7 operational 26 planned	SED Centers (4) Brunswick Center in addition to above (Cost $618,000.00)
Needed:	Combined Effort in Regional Psychoeducational Centers*	
1972-1973	7 Psychoeducational Centers*	
$1,750,000.00	Child Mental Health ($875,000.00)	Special Education ($875,000.00)

1973-1974	9 Psychoeducational Centers	
	Child Mental Health	Special Education
$2,250,000.00	($1,125,000.00)	($1,125,000.00)
1974-1975	12 Psychoeducational Centers	
	Child Mental Health	Special Education
$3,000,000.00	($1,500,000.00)	($1,500,000.00)
1975-1976	16 Psychoeducational Centers	
	Child Mental Health	Special Education
$4,000,000.00	($2,000,000.00)	($2,000,000.00)

* These figures are based upon 60-child Center costs, $250,000.00 per Center.

(from Wood, Quirk, and Swan, 1971)

certain basic program evaluation procedures. This made it possible to monitor, not only each center's effectiveness, but the effectiveness of the Network's total effort.

While the replication plan was being designed and contacts were being made at the state level, there was important activity going on locally in each region of the state. Our staff worked closely with special education teachers, mental health workers, school psychologists, parents, and disturbed children in each region in order to set into motion a grassroot's concern about the need for services and the potential solutions to be found in this model. We were available as consultants, colleagues, listeners, friends, and fellow-laborers always at no cost. We tried to be sensitive to local conditions, to how people felt, and to how they conducted their daily business. We found that it was important to work within the frame of the existing agency processes. We recognized that it was important for credit and leadership to remain among the local leaders. As a result, each new center was established by local effort upon an established agency base.

With this combination of a plan to tell us where we were going, local action, and an effective demonstration at our center, the network plan emerged year-by-year just as we hoped it would.

Preparing Material for Impact

Packaging and repackaging information about the demonstration model and the proposed statewide network became the major vehicle for influencing large numbers of people. We developed a logo and a slogan, "We Grow Kids." We used the logo and slogan on fliers to women's clubs and men's civic groups, with the caption "This child needs your help." A large poster was printed to help recruit new staff for the developing centers with the caption "Help Us Grow Kids." A professional journalist wrote eloquently about a child and family who needed help and found it at the Rutland Center. This highly effective article became a booklet printed and distributed by the office of the State Superintendent of Education. It was titled "We Grow Kids."

In addition to public-arousal information we also prepared an operating manual which described each component of the demonstration model and could be used by any professional group establishing a psychoeducational center (Wood, 1972). Also, a professional journal article which described the demonstration and cited this manual was published in 1971 (Wood and Fendley, 1971). The mail we received from outside the state requesting this manual was considerable; it encouraged us in our efforts to replicate beyond Georgia.

Perhaps more mileage was obtained from our audio-slide show ". . . And a Child Grows" than any other single item (TAPEC, 1971). This presentation was designed for our target groups: users, conveyers, and supporters. In it we attempted to illustrate the need, the solution, the costs, the alternatives, and the role that each of the target groups can play in bringing psychoeducational center services to their communities.

Finally a word about a joint task approach is in order. Because the Rutland demonstration is a service program for children in a particular geographic region of the state, it could not possibly serve as the administrative locus for the Georgia Psychoeducational Center Network. The proper place for such administration is in the designated state agencies. From the beginning this point was fully acknowledged by the Rutland project and efforts at joint development with the state agencies received a high priority. Planning was a cooperative effort among the Departments of Mental Health, Education, the Governor's Office, and the project staff. In particular, collaborative efforts produced both the original network proposal and the budgets submitted to the legislature and the respective state boards. Other joint tasks included the guidelines for submitting plans to establish a psychoeducational center and follow-up planning conferences at each site (Georgia Department of Education, 1973). From these activities the technical assistance office of the Georgia Psychoeducational Center Network emerged. The office has worked each year in concert with state and local agencies to insure the highest possible standard of service.

In summary, the Rutland project used eleven general strategies for accomplishing statewide replication. These have been reported in a review of exemplary preschool programs for the handicapped (Platt, 1973).

> Assess the community's needs, define the problem situation, and then develop a solution. Be prepared to sell a well-conceptualized program.
>
> Identify the power structure. Approach an influential group that would be greatly concerned about programs for the handicapped and solicit their support.
>
> Be available for free consultation.
>
> Make the community aware of the problem and the fact that something can be done.
>
> Encourage community members to contact their legislators.
>
> Convince a state agency that this is their problem.

Propose the program and request reasonable funding.

Administrative personnel should have demonstrated competency in the field, not just seniority.

Staff must fully understand program objectives and procedures to perform effectively.

An evaluation model must be an integrated part of the program.

Keep objectives in mind constantly; if the program begins to stray, refocus the activities or re-evaluate the objectives.

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